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TABLE OF CONTENTS.

AMERICAN
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ON PROGRESSIVE MENINGO-CEREBRITIS OF THE INSANE.

BY THEODORE DEECKE.

II.

It is a fact to which attention can not be too forcibly called that the discovery, and the successful demonstration of microscopic morbid evidences in the bodily organs, not infrequently depends entirely upon the manner in which the autopsies are performed. It is true, that there exist rules as regards the proper examination of the various cavities of the body, and the methods to be employed for the removal of the different organs for closer inspection and dissection. Yet it will be easily conceived that each dissector from his own experience and in conformity with the requirements of respective cases, might at any time be obliged to replace those methods by others, promising to more fully satisfy the demands which present themselves. This applies more especially to the dissection of an organ, so delicate and complicated in structure, as the brain. It is well known that not very long ago, certain conditions, observed in the encephalon were regarded as of great consequence, as unmistakable evidences of disease, which, later, have been recognized as changes produced after death by

the special, although entirely natural process of decomposition in this peculiar organic formation. On the other hand, little or no attention was paid to occurrences which, at the present time, are acknowledged as anomalies and the results wholly of morbid action which, probably in a large number of instances at least, was of longer duration than is generally admitted.

Among the latter I include an anatomical condition quite commonly found in the encephalon of individuals, who have died insane, and which apparently has been confounded with another quite similar in appearance, but entirely different as regards its etiological and pathological significance. That this not only could occur, but was the natural consequence of a certain custom in vogue, connected with the manner of opening the skull, and the dissection of the membranes and the removal of the brain, can be easily shown and explained. The anatomical appearance to which I refer here is the so-called effusion or the accumulation of a serous fluid in the arachnoid and the subarachnoid spaces.

The utmost precaution at autopsies should be observed in removing the skull-cap, that the saw does not cut too deep and that it at no place penetrates the whole of the bony integument. The most dangerous place in this respect is the occipital arch of the skull where, by the action of gravity, the brain with its membranes rests closely upon the calvaria. The slightest injury to the membranes at this place is an injury to the brain itself, and is apt under certain circumstances to change the condition and the aspect at the frontal, central and lateral lobes, especially in cases of accumulation of fluid, of exudations or hæmorrhages in the encephalic cavity, so completely, that nothing or only very little may be learned afterwards

of the actual state of affairs at these places. A similar damage of course is done by carelessly injuring the membranes below the temporal, the parietal and the frontal bones.

It is always advisable to break, at least the last one sixteenth of an inch of the inner plate by the aid of a chisel, carefully controlled. The depth reached by the saw can easily be judged by attentively listening to the sound produced when its teeth enters the inner plate.

Only in cases of a suspected tumor or abscess in centrally located portions of the cerebrum, is it advisable to cut with the saw, by using one with a broad blade, through the whole of the brain-substance. Sections are made in various directions, without removing any portions of the calvaria. In these cases the displacement of the parts produced by the growth of the tumor or the cavity formed by the abscess, permits of a closer study and more correct judgment as to the effect upon their surroundings and the positive or negative pressure which had been acting upon the more remote parts in the encephalon, when the brain is examined by this method.

Similar precautional measures should be resorted to in dissecting the pia mater. It is in almost all cases advisable, not to strip or remove the dura at once. After the skull-cap has been separated, if necessary, from the dura the latter should be dissected in all directions downward as far as possible from the bony encephalic cavity. Then a circular cut should be made with a small knife provided with a blunt head. If the dura mater is now reflected from either side the larger portion of both hemispheres and the frontal lobes may be exposed and are open to a close inspection. In cases now, where the arachnoid membrane appear as

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raised up or exhibit, blister-like prominences, these points by the use of a pointed glass tube, provided with a rubber ball, should be punctured and the fluid accumulated there be collected, for the result of the chemical analysis of this fluid, as I will show later on, is a matter of great importance. By these manipulations it can be demonstrated whether there exist connections between such places of exudation or accumulation of fluid or not, a question of great consequence in cases in which the character and the chemical constitution of the exuded fluids should be found differing from each other.

The exact seat also of hæmorrhages or ecchymoses and their relation to, or their connection with the serous exudations can be plainly shown and should be examined. The condition, further, of the veins of the arachnoid which empty into the sinuses and of the Pacchionian bodies permit of a close study and should be subjected to careful observation.

All this, as it is, can only be accomplished with advantage as long as all the organs here mentioned remain, as far as possible, in their natural position. After the dura has been dissected, even by using the utmost care, there invariably occurs such a gross change in the aspect and the appearances of the subjacent organs that it would be impossible to draw from the same any exact conclusions concerning the conditions which previously existed.

The greatest wrong, however, from a pathological view is done to the parts here involved by the practice, formerly universally and at the present time still frequently in vogue, of stripping the arachnoid membrane and the pia mater from the surface of the brain proper. By this almost barbarous manipulation the injury done to both organs is so extensive that often all further inves-

tigations are in fact rendered entirely worthless. Even the question whether there existed adhesions between these membranes and the grey cortex of the brain can not be definitely decided, nor, in case they exist can their nature be determined, even by the most minute histological researches, and yet this point is of especial interest and import. By carefully hardening the brain with its intact membranes in the manner which I have described in this and other journals and by employing my method of section cutting, I have shown that there is no necessity of resorting to such extraordinary and unscientific measures. With the exception of tumors, abscesses and perhaps capillary emboli in the brain, it can be safely asserted, that there exist no pathological processes in the organ in which the arachnoid membrane and pia mater are not more or less involved and primarily involved, either in their important office of protecting the brain itself from morbid invasion, or relieving it from accumulation of morbid productions. Not infrequently, indeed, do morbid processes find their origin in these membranes and extend to the brain cortex.

It has, in my opinion, been a serious omission, that the condition of the soft membranes in affections of the encephalon, especially when associated with mental disturbances has hitherto received, comparatively, little attention. Gross changes, when found, have always been taken into due consideration and the minor ones, it is true, were commonly mentioned when discovered, but little or no significance was assigned to them. More or less accumulation of serous fluid, for example, in the meshes of the membranes was not regarded as being of any consequence. According to one explanation, if not too copious, it was considered as simply a post mortem change, or a transudation, having occurred

during the last struggle for life. This may be correct, but it does not explain its physiological significance. Chemical and microscopical examinations of the exuded fluids were made only when they were found in large quantities as in cases of hydrocephalus, etc. Wrong ideas also of the cerebro-spinal fluid, its movements, its composition and significance, not infrequently led to the confounding of abnormal with normal appearances and *vice versa*. The latter fluid under all circumstances, can only be distinguished from serous transudations or exudations by the determination of its chemical constitution. It is by itself in the normal state a secretion which represents a saline solution, of lighter specific gravity than blood-serum or plasma, containing the same amount of saline substances as the latter, but either no albuminous compounds at all, or not more than one or one-half parts in one thousand, according to some authors, provided that the examined fluid was collected with all precautions necessary to prevent any admixture. The morbid transudation and exudations, on the contrary, are always marked by a more or less large amount of albumine or fibrine or other nitrogenous organic compounds. Now we know very well that even cases of quite limited transudation or exudations, occurring in one or the other organ, do not exist without some more or less marked interference with the normal function of the respective organ or symptoms of a more general character. Thus, for instance, even a very small amount of albumen passing out with the urinary secretion arouses attention and is considered of significance and not infrequently is associated with manifest impairment of the general health. Now, since it is known that only egg-albumen or so-called albumen for nourishment, when injected directly into the blood current is in a physiological way readily excreted by the kidney, while

the living is retained, no one, who is aware of these facts, will probably hesitate to declare the phenomena as evidences of morbid action or morbid processes and indicative either of a diseased condition of the organ furnishing the secretion or of abnormalities in the general change of matter, of a deficiency somewhere in the system of the power of converting the albumen for nourishment into the living molecular state.

Similar conclusions, of course, are permitted to be drawn in cases of discovery of abnormal products or secretions in any of the organs of the body. Similar morbid formations not infrequently occur in the encephalon. The so-called *état criblé* has its origin in the dilatation of the perivascular and pericellular spaces produced by exudation of fluids into the same. Still more common and characteristic of a certain form of chronic meningitis, which probably is always associated with symptoms of mental impairment, are exudations similiar in nature, into the spaces of the arachnoid. When closely examined they are, even by their external appearance, distinguished from simple accumulations of cerebro-spinal fluid or serous effusions after death, and are marked by the different chemical constitution of the fluid which they contain, and by histological changes produced in the surrounding tissue.

In the first part of this article I have endeavored to give a detailed description of the anatomical and physiological relation between the normal spaces in the arachnoid and pia mater and the different cerebral and spinal spaces. These arrangements in cases of local changes of the normal hydrostatic pressure into an abnormal positive or negative one allow, by the movements of the cerebro-spinal fluid, a prompt physiological compensation and relief of the parts thus affected. Where interference exists or develops between the free

communication of these spaces consecutive upon either the formation of cystic dilatations or cavities or neoplastic exudations in the tissues of the arachnoid and the pia mater, the return from the abnormal state and its associations and consequences can be expected only from pathophysiological processes with their doubtful, either benignant or malignant results.

The earliest changes connected with the pathological processes, here to be described, take place in the immediate neighborhood of the veins of the arachnoid which empty into the sinuses. In these changes, the villi of the arachnoid or the so-called Pacchionian bodies seem to participate from the beginning. The anatomical picture of the brain as seen in situ, after the dura mater, or better, only those portions thereof have been carefully removed, which are not by blood vessels and their adventitious tissue and surrounding lymphatic spaces in direct connection with the arachnoid, is that of an organ beset with blister-like eruptions of various sizes, from the circumference commonly, of a pea to that of a large hazel nut. It resembles in external appearance a condition not rarely found in the dissecting room after death from heart disease, either connected or not, with acute or chronic affections of the lungs or the kidneys, or in cases of violent death from injury to the skull, or as the effect of various poisonous substances or acute infectious diseases, all of which may be accompanied by limited submeningeal serous effusions or local accumulations of cerebro-spinal fluid. Both of these latter conditions are recognized as of recent origin, either by the chemical composition of the exudation, or by the absence of formative elements in the fluid with the exception of occasionally a few white cells and perhaps isolated red blood-corpuscles, and by the more or less easy displacement of the blister-like erup-

tions, when subjected to artificial pressure. In most of these cases the membranes have retained their natural transparency. In others, by the deposition of fibrin-coagula in the dilated meshes of the arachnoid and the pia mater, especially as the result of passive congestion in connection with œdema of the meninges, in the terminal stages of various diseases, an opacity, at times even a considerable cloudiness of the membranes may be observed closely simulating the appearance presented by inflammatory processes and purulent infiltrations. Another cause of cloudiness of the soft membranes, at times associated with the conditions mentioned, has been discovered to be produced by a hyperplasia of their endothelial elements or endothelial thickening, which, however, probably must always be regarded as the result of chronic irritative processes.

It is unquestioned that a clearly-defined distinction between these morbid conditions can be made, and their true nature be recognized only by minute microscopical study, aided, when necessary, by micro-chemical tests and chemical investigations. There are, as far as I know, no other means at our disposal of distinguishing between the effects of acute and chronic morbid processes, and I believe that it is largely owing to the neglect of these means of investigation in each case that a deplorable confusion still exists as regards the pathognomic value and significance of the various forms of post mortem appearances in the encephalon, which are briefly mentioned above; a confusion which has contributed much to the spread of the vague assertion, that encephalic morbid processes and actual brain lesions might exist without any noticeable impairment of brain function, or that even so violent and marked disturbances of function, as the symptomatology of insanity presents, might exist without any evidences of morbid action upon, or any material changes in the cerebrum.

It is true beyond dispute, in my opinion, that the nervous, especially the brain tissue, as the most highly developed of all tissues, exerts, perhaps, the most powerful resistance to material alterations, while on the other hand it is the most excitable and irritable of the tissues. It thus appears to be especially protected against changes in composition and form liable to be produced by the action of chemical and dynamical or molecular energy. In the latter case, inside of certain physiological limits; in the former there are to be excepted a certain number of agencies of a specific affinity to some of its elements. It is less resistant to affections produced through the influence of mechanical force. It may be theoretically claimed, therefore, that there is a greater danger of the development of morbid affections from influences of the latter, than from abnormalities in the general internal change of matter. This is undoubtedly in conformity with the practical experience of the deleterious influence of mechanical injuries from a sudden shock or continuous pressure as produced by congestion, exudations, hæmorrhage, the formation of false membranes and hyperplastic tissues, or acute or chronic inflammations. These pathological processes are first of all observable in the meninges, and in a multitude of instances, in my opinion, their true nature is very apt to be incorrectly recognized or their significance to be underrated.

The important offices of the meninges for the proper nutrition of the brain and its protection against circulatory disturbances by special anatomical and physiological arrangements in their own vascular supply, are well known facts, which have been discussed in several articles in this JOURNAL. The conditions of acute meningitis, lepto-meningitis, of the various forms of external and internal pacchy-meningitis have been well

studied and their invariable association with mental symptoms has been universally recognized. Much less is known of the chronic affections of the pia mater and the arachnoid, not only regarding their nature but their course, their progress or arrest, and the symptoms associated with them and indicating their existence. I speak of processes since, as far as I can judge at present, two are to be distinguished, well defined and full of characteristics in the development and course, although the occurrence of intermediate stages between them or their occasional cotemporary existence will not be denied.

The process here referred to commences, as has been indicated in the foregoing, at all times in the arachnoid and more especially in its upper layer adjoining the dura mater, and at places where both are in a direct vascular connection. This is an hypothesis inasmuch as proof of the correctness of the view has been deduced only from a comparison of the more or less advanced changes observable in structure. They consist in the beginning apparently of an increase of veins branching off from the larger stems which empty into the sinuses; of a formation, if I may be allowed the expression of an anastomosing network of venous capillaries, largely differing in calibre, and provided with exceedingly thin walls. They seem to be of a transient existence, since they are apt soon to collapse, leaving behind in the meshes of the arachnoid an irregularly shaped, often knotty, inelastic framework. Their pathological significance must be regarded in a direct ratio to the frequency of their occurrence. They are recognized in carmine sections by the slight yellowish, here and there more brownish color they exhibit according to their age or the amount of blood coloring material which they have retained. Where

they are found in large numbers they of course produce a remarkable change in the anatomical structure and appearance of the membrane, and, physiologically, must interfere considerably with its normal power of expansion and contraction.

The condition, nevertheless, even in the latter case, is difficult to detect by the unaided eye and more especially so after separation of the dura mater, by dividing the communicating vessels. This is the reason why it has been overlooked or so little attention been paid to it. When the latter are properly ligated, it is comparatively well preserved, yet the best practice is to remove, before hardening the organs only those parts of the dura mater which are not in direct connection with the arachnoid. It then can be closely studied in vertical sections through the membranes, and the adjoining parts of the grey cortex of the convolutions. Loops of recent origin occasionally may be brought to view by careful injections from the main stems. These vascular new formations are lined mostly by not more than a single layer of endothelium, and very apt, therefore, to shoot off branches or to become dilated or even to rupture.

Evidences of the latter are frequently found in deposits in the meshes of the arachnoid, occupying, however, small spaces only. In cases of this kind the microscopical picture may not be unlike the condition seen in vertical sections through the false membrane of the so-called pachy-meningitis-interna-hæmorrhagica with the exception of generally a more crowded exhibition of pathological structures and elements in the latter case. The lesion is rarely an isolated one, yet of the changes associated with it I shall speak further on.

The main causes of these changes are unquestionably local circulatory disturbances, more directly of the venous afflux, viz.: a venous stasis or a so-called passive hyperæmia or congestion. This venous hyperæmia in cases, where it is not immediately followed either by acute inflammatory processes or acute hydrocephalus, must be regarded as an affection of a chronic nature since it involves invariably changes in structure of the vessels and adjoining tissues which are not liable to return readily to the normal state. Among these are to be mentioned an increase of the amount of peri-vascular protoplasm, of cellular, especially endothelial elements, a dilatation, with its consequences, and elongation of the vessels, thickening of their walls and the formation of such vascular loops, as above described, in which blood is forced to stagnate.

Etiologically this chronic hyperæmic condition of the veins is produced as well by repeated arterial congestion, or sudden changes between arterial distention and relaxation, as by arterial sclerosis and anæmia proper. In all these cases the indirect effect upon the venous system in the first instance is physiologically the same, viz.: a retardation of the venous current and afflux connected with the liability to form thrombi of various dimensions by the accumulation of white corpuscles adherent to the walls of the vessels, or collecting at the bifurcations, etc., which, as before said, if it does not lead to actual inflammation or exudations, results in the production of the various material and structural changes of the vessels above enumerated. The process is in general the same as in other organs. Of importance, however as regards its effect upon the tissues and further developments is the locality and its peculiarities. Considering the delicate loose structure of the membrane, in which the vessels

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are suspended, it is evident that there will be but little resistance offered to changes by their surroundings. On the other hand, as stated in the first part of this article, ample structural arrangements exist which favor limitations of local morbid process. From this the conclusion may be drawn that there is for a time probably as little chance for the regression of the once established morbid condition as for its progression, which seems to be corroborated by anatomical facts, as far as the arachnoid proper is concerned. It is not uncommon to observe therein changes of considerable intensity, but of limited extension. Yet the danger remains that, if regression does not take place, the altered portions in proportions to their loss of normal function may draw others into sympathy and produce in them disturbances and conditions of a similar nature.

Another danger arises from the decomposition of the blood, although generally of small quantity, cut off from the circulation, as also from the isolation of portions of the membrane and the liability of these to become transformed into cystic cavities and reservoirs for exudations. This is, indeed, the natural course of development. Such cystic formations, although quite similar in external appearance to simple accumulations of fluid in the spaces of the arachnoid, are of course anatomically and physiologically of very different significance. They are as structures of a stable nature sources of continuous pressure and irritation upon the surrounding tissues. This is amply demonstrated by the changes which are thereby induced. If they are located in the neighborhood of the villi of the arachnoid, these are invariably found hypertrophied, frequently penetrating the sinuses and projecting above the external surface of the dura mater. The elevated portions of these are almost always exceedingly vascular

and liable to hæmorrhagic and other exudations which result in adhesions between the dura and the calvaria. In other instances, or concomitant with the former, the cysts settle downward into the tissue of the pia vera and may produce there hypertrophy and thickening of the membrane and exert a continuous pressure upon the adjoining convolutions, too often only terminating in the compression of the grey cortical substance and the consecutive atrophy and shrinkage of the same. These are conditions well known and their importance is undisputed, yet too little weight, I think, has been laid upon their actual origin and connection with a well definable pathological process progressive in its effects and action.

The history and development of these cystic formations can be followed up quite closely when they are correctly recognized. Some of their characteristics have been referred to above. They represent completely closed sacs or reservoirs lined internally by, at times, several layers of endothelial tissue, which points toward their origin in, and intimate connection with, the adventitious or perivascular sheaths and ducts. Not less remarkable and significant is their contents. Its chemical composition differs materially from that of the cerebro-spinal fluid. It is always comparatively rich in albuminous compounds. There may be present in the exudation formed elements, as ordinary white cells, or granular corpuscles of twice and three times their size, irregular yellowish colored bodies of a mixed, half fatty, half proteinous nature, fatty granules and crystals of fatty acids and tablets of cholestearin. In other instances, probably dependent upon their age, no formed elements whatever are discoverable, except, perhaps, a few colorless discs, the remnants of red blood corpuscles.

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The changes in the course of this morbid process are, however, not confined to those heretofore described. The hyperplastic processes in the arachnoid membrane may assume such character and dimension that they invade the pia mater vera and that the tissue, in its affected portions, is actually replaced by such altered arachnoidal structure. In these cases the anatomical relation of the pia mater to the grey cortex of the convolutions is entirely changed. Adhesions are formed between the upper connective tissue layer of the latter and the adjoining tissue of the pia vera. These, probably the result of irritative action, consist always of a fibrous growth, very delicate in nature, proceeding from the upper cortical layer in a vertical direction to and into the tissue of the pia mater and they never commence in the latter and proceed in the opposite direction. This is a fact not alluded to heretofore, but it is applicable to the cerebral surface as well as to similar conditions found in the medulla oblongata and the spinal cord, conditions very common for example in cases of the general progressive paralysis of the insane. By these adhesions channels of communication are formed between the spaces of the pia mater and the connective tissue envelopment of the grey cortex of the convolutions which, unquestionably, are liable to favor an invasion of the latter by morbid processes active in, and affecting, the former.

There was a time when by some parties great importance was laid upon the so-called adhesions between the pia mater and the grey cortex of the convolutions of the brain. By others this condition was not sufficiently and correctly recognized. Its true significance has not yet been understood, for the reason that the really existing anatomical conditions and relations had not been satisfactorily investigated. The crude manner,

commonly practiced, of simply stripping the delicate membraneous structures from the still more delicate cerebral surface, was wholly inadequate even to decide the simple question whether there existed adhesions or not. Various circumstances, as the condition of the organs in any particular case, their exposure during the autopsy, the time which had elapsed between the time of death and the time when the autopsy was made should be taken into consideration, since changes in the relations of the parts by physical and chemical influences are liable to occur which may lead to a wholly deceptive judgment of the true natural condition. Questions of this kind, important as they are, and, as I think, more important than is generally acknowledged, can be decided only by the most subtile investigations, viz., the examination of microscopical sections made through the respective organs uninjured and, as far as possible, in their preserved natural state. It is a very different matter concerning adhesions observed between the dura mater and the calvaria, the lungs and the pleura or between other organs and their neighboring parts, but it can be safely said that the whole medical literature as regards the so-called adhesions between the cerebral surface and its adjoining membranes, between the spinal cord and its envelopments, and their pathological significance, thus far, amounts but to little, if in the recorded case their actual existence has not been investigated and proved by microscopical observation.

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ently of an organized protoplasmatic exudation from the latter. This tissue often is of an exceedingly delicate nature and then, even in sections thoroughly stained, difficult to demonstrate, yet it is present, I believe, in all cases, although at times it would seem to resemble rather a slightly tinged mucoid or gelatinous coat. Neither of these is ever found in normal specimens, but both may be observed without the existence of true adhesions. From this fact the inference must be drawn that they precede and perhaps induce by irritative action upon the cerebral surface the formation of the adhesive tissue. In the majority of cases all the various stages in their succession and progression can be observed. In the most advanced the involved structure of the pia mater is found changed to such an extent that the line of demarkation between it and the altered cerebral tissue becomes indistinct and indeterminable, except at points where vessels of larger or medium calibre enter the grey cortex. Smaller vessels, like those originating in the network of the arachnoid and supplying the upper layer of the cerebral cortex only, are not rarely found completely collapsed and obliterated by compression, whereby the proper nutrition and exchange of material in these districts is interfered with and the tissue becomes subject to changes. The so-called spider cells, found in connection with these changes are transformations of the star-shaped cells; there is an increase of fibrillar structure and sooner or later a more or less abundant infiltration of nuclei takes place. Similar conditions, as is well known, are observed in the brain of paretics, but they are neither confined to, nor characteristic of, the paretic process, at least as long as they do not extend below the associating tracts into the white layers. In this connection it is worthy of comment, that the question, indeed, is still

undecided whether essential differences exist in the nature of the pathological process in the paretic and in other forms of insanity, or whether the characteristics of the symptoms and their course are dependent only upon the seat, the course, the progress and the advancement of the morbid process. In all cases the latter is the result of but one original factor, specific causes excepted, as syphilitic, tuberculous or parasitic invasions, viz.: circulatory disturbances and their consecutive changes from impairment of nutrition. The character of these changes is determined by both the nature of the organ or tissue which is made to suffer as well as by the intensity of the disturbance and its course, including its duration and effect upon the structure of the circulatory apparatus itself. It is subject therefore to great variations.

The more uniform the structure of an organ and consequently its function, the more apt it is, under such circumstances, to develop, in accordance with the primary nature of the affection, more or less well defined pathological conditions with a likewise well defined symptomatology; or, in other words, the morbid processes will be more distinct in their nature and more easily distinguishable from each other by their effects. Nevertheless, even in such organs, complications may and do occur by the cotemporary action of different morbid affections or by stages of transition and a final evolution from one into another, as is illustrated, for example, by the relation of the different forms of nephritis, hepatitis, pneumonia, etc., to each other. This, of course, must be much more apparent in an organ of so subtile, multiform and complicated, yet, as we must suppose in regard to its inner organization so accurate and perfect a structure as the brain with a functionality which embraces the whole sphere of auto-

matic vegetative as well as of the conscious and unconcious animal life of man. Here exist conditions on the one hand which must favor an ensemble of pathological processes, varying chiefly in character as well as in their tendency either to limitation or extension with the respective seat of the primary affection. On the other hand, their correspondence and direct or indirect connection with symptoms observed are as indeterminable as the correspondence and connection of the phenomena of normal brain function with the normal cerebral processes and cerebral topography. All that we know positively of the effects of morbid processes is that they are more diffused or are liable to become so, the more they invade those parts which supply the brain and assist in its interchange of matter and constitute its natural protection against the direct transmission of abnormal influences from without, viz.: the meninges, and more especially, the pia mater vera. That specific form of chronic meningitis, or, as I prefer to call it, arachnitis, in which the pia vera becomes extensively involved is by far a more dangerous condition than any local morbid process or focus in almost any part of the cerebral structure itself. In the latter case the tendency prevails to limitation, and under favorable circumstances even to reparation; in the former to progression and diffusion, and its symptomatology consequently is distinguished by its more persistent, progressive and diffused character.

As regards the locality of the morbid process above described, it has been mentioned that its principal and favorite seat in the initiatory stages is opposite and in connection with the sinuses of the dura mater, involving subsequently the anterior and posterior central and præcentral convolutions. According to the new theories of the localization of function in the grey cortical

substance of the brain, a considerable portion, therefore, of the so-called motor zone or region is involved. This circumstance does not necessarily demand that this affection should give rise first of all to motor disturbances, and the fact that symptoms of this kind are not exhibited is, indeed, not a proof against the correctness of that theory. There is in this case neither associated with the affection a sudden or complete destruction of cerebral tissue nor an electric excitation. The action is at first a purely mechanical one, of pressure, producing gradually a local irritation followed by interference with the normal interchange of matter and function of life and consecutive changes in structure. Since this action, however, in many instances and probably for a long period remains confined to the grey cortical tissue, it is a fact, worthy to be remarked, that the symptoms, thereby produced, are such as indicate affections in the sensory sphere only, until, as it may happen, by a gradual descension of the morbid process into the white fibrous tissue of the convolutions complications arise indicative of direct disorders in the motor sphere. This fact, as it seems, must add to the objections, made by the adversaries of that theory and elsewhere by myself, no matter if the name of motor or psycho-motor centers be preferred or adopted, since the latter expression is in so far misleading as *psycho-motor* centers must exist distributed over the whole grey surface of the cerebrum. They can not be confined anatomically and physiologically to any special place or convolution not even in the sense of a psycho-motor center for a certain group of muscles, since experience demands that any voluntary muscle must be apt to be set into action from any place or point in the grey cerebral cortex. If this were not so, we would be forced to pre-suppose the existence of other than the

anatomical and physiological connections in the central nervous system outside of and not accessible to scientific investigation and research. This would be a step backward in physical science, into the old theory of the existence of a fluid or a mobile agent constituting the animal soul.

Motor and sensory tracts do exist separate from each other in the cerebrum as well as in other parts of the central and the peripheral nervous system, and they are excitable, in themselves centralized, to specific action. There are also, and this is, I think, amply verified by physiological investigation and experiment, to a certain extent, separate centers for the function of vegetative and animal life. But in the region of the union of the sensory and motor tracts, viz., the places of the conversion of nervous energy, the connection can but be universal and the conception of a division of these into centers of action or sensation is an entirely arbitrary conjecture. The assertion that the existence of such psycho-motor and psycho-sensory centers in the grey cortex of the cerebrum has been established or even made probable by the numerous well-known experimental researches made upon the brain of animals is entirely presumptive, if not for any other than for the simple reason that there is neither anatomically nor histologically a distinct line of demarkation in the cerebral cortex between the conductive elements and those in which the conversion of nervous energy is supposed to take place. It is wholly absurd, therefore, to believe that in any one of the experiments that line has been observed or that there is any possibility of doing this. The psychological line of demarkation likewise escapes the hands of the experimenter, for he has no other means of judgment of the value of his experiments than from the visible effects produced, which are the same whether he has been acting upon a center or a tract.

On the other hand, however, as regards morbid action upon these parts, it can be well conceived that there is no reason why the natural line of demarkation should not come into effect and become observable, in special symptoms. In other words, it is not only possible but quite probable that a pathological process may be confined, and remain so for some time, to the one or the other tissue elements. It may act, for example, only upon the converting nervous elements, without drawing at once the conducting elements into sympathy, since, notwithstanding their intimate histological connection, they are morphologically of very different nature and consequently of different behavior, when exposed to morbid influences. This is wholly in accordance with the laws valid everywhere in cellular physiology and pathology. There exist not only great differences concerning the susceptibility or the power of resistance of the various tissues toward abnormal influences, but also as regards the transmissibility of diseased conditions from one tissue to another. A close study, therefore, of the localization of the morbid processes observed in the brain in any and every respective case, as I am inclined to believe, promises more in enlarging our information and knowledge of cerebral physiology than any and all of the hitherto only rough and often cruel, and wholly misleading experiments upon the animal brain. The way in order to arrive at conclusive results may be long and weary, more skill is demanded and more labor absorbed than in direct experimentation, yet it is less open to vague speculation, to errors in judgment and to suppositions, as we have seen, without even a shadow of truth. It is not intended, however, to follow up this question in this connection.

The portions, involved in the pathological process, next to those mentioned above, are the convolutions

surrounding the Sylvian fissure. Then, secondarily, mostly by infiltration the island of Reill and the claustrum, both as it seems from their anatomical structure and connections in the capacity of combined grey and white commissures of the system of associations between the frontal, parietal and occipital lobes. In quite advanced cases the external capsule, viz.: the white commissure between the same territories may be seen invaded.

Invariably, however, and frequently in the initiatory stages the ependymal tissues of the lateral ventricles is involved in the process. It originates likewise in the large veins with the lymphatic appendages there located. An infiltration of these structures always gives rise to extensive pathological new formations of a more or less fibrous nature, crossing the same in all directions. It raises toward the ventricle its epithelial lining and at numerous places may penetrate the same and break through into the ventricular cavity in the form of microscopic tumors or craters with an ulcerating head or surface. This condition, probably associated with symptoms only of a general character, in its advanced stages can but be of fatal influence. It affects the circulation in the great central ganglia in which the perivascular spaces are then found packed with leucocythes, the arterioles and capillaries often are enclosed in a cylindrical or bulb-like atheromatous pulp. Capillary hæmorrhages are more rarely observed. The tendency to the rupture of larger stems is increased and not infrequently the cause of a fatal termination.

The whole pathological process, as here described, may of course at times or for a time come to a standstill in any of its stages of development. Its apparently progressive character, however slow its advancement may be, can not be denied, as also its permanent and

chronic nature, for it involves series of grave structural changes, liable to regression perhaps only in the initial stages under favorable circumstances. It is in either of its stages one of the most frequent morbid conditions found in the brain of the insane, and commends itself therefore in every respect to the fullest consideration. Its special effect upon the nervous tissues and the pathological changes thereby produced, will be the subject of another article.

REPORT OF A CASE OF EPILEPTIC INSANITY, WITH THE "ECHO SIGN" WELL MARKED.

BY CHARLES W. PILGRIM, M. D.,
Assistant Physician, New York State Lunatic Asylum.

The "Epileptic Echo" was first brought prominently into notice by Echeverria in his article on "Epileptic Insanity," published in the AMERICAN JOURNAL OF INSANITY for July, 1873, and very little, if anything, has been written of it since. It is true that it is not characteristic of the insanity of epilepsy, and that Romberg,* who speaks of it more particularly than any one else, believed it to be an indication of cerebral softening. Echeverria, however, holds that his view was erroneous, and thinks that in the case cited it was merely due to a perversion of the will. At all events, whether it is characteristic or not, it is quite probable that it occurs oftener in the insanity of epileptics, than in cases suffering from any other form of cerebral disorder.

In the following case the symptom was present in a very marked degree. The patient was first admitted into the New York State Lunatic Asylum eight years before his death, when he was twenty-six years of age, with the following history: He had led a very dissolute life and had been a hard drinker for years. Two years before admission, while in a house of ill-fame, he was severely beaten and afterwards thrown out of doors in the snow, where he nearly perished of cold. After this he was sick for some time, and upon regaining his physical strength he would not go out as formerly, but

*A Manual of the Nervous Diseases of Man, by Moritz Heinrich Romberg, p. 431.

for months sat in the house in a depressed and listless condition. Finally, however, he again sought his old companions and resumed his habits of drinking and carousing. He would go into saloons and dance and stand on his head for money or liquor, and acted altogether in such a manner that his friends began to think that he was insane, and at last concluded to secure his commitment to an asylum.

During his residence in the asylum, a period of fourteen months, the records show that he was subject to paroxysms of violence every few days, but no record is made of any convulsions. This is not unusual, however, as most authors agree that there is a type of psychosis characterized not only by violence, but even by irritability and impulsiveness, which seem to take the place of epileptic seizures.

Towards the close of his stay in the asylum he began to manifest more mental vigor, and to display a good degree of self-control. He was, however, indolent, selfish, and at times irritable. While in this condition he was taken home by his friends.

Nothing more was heard of him for about five years and a half, when he was readmitted. His friends stated that soon after leaving the asylum he fell into his old ways, but got along fairly well until about two months before his second admission, when he witnessed a sudden death in a saloon, and soon afterwards became depressed, seclusive, and controlled by depressing delusions and apprehensions that he would be connected with this death.

In the office, on the day of admission, he was sullen and morose, manifested no apparent recollection of recent events, was dull of comprehension, and answered questions only after they had been repeated several times.

After admission he had to be dressed and undressed, was filthy in his habits, and rarely spoke to anybody. When he did speak, however, it was only to declaim his own unworthiness, and on more than one occasion he said that he was not fit to live as he was the worst man in the world, and asked for a knife with which to cut his throat. This symptom is of interest in view of Dr. Clouston's* remark that insane epileptics are rarely suicidal except as the result of hallucinations of hearing. The suicidal tendencies in this case were wholly from a sense of the patient's unworthiness and the profound state of depression which he was in.

This state continued from the date of admission, in March, up to the following June, when he began to manifest more mental vigor and to display some interest in his condition and surroundings. He ceased to speak of his unworthiness and began to render a little assistance in the work about the house and farm. He continued in quite a comfortable condition up to the morning of the 19th of July, when he was seized with an epileptic convulsion, while working in the field, and had fifteen seizures within the next twenty-four hours. He then passed into a comatose condition and so remained for three days, during which time he could not swallow even fluids. From this state he gradually emerged, but he never afterwards reached the mental condition which he was in before the attack.

It is thus seen that the first positive evidence of epilepsy was observed a little over seven years after he first came under observation, and about nine years after the beginning of the insanity, for it does not appear that the patient ever fully recovered from the attack induced by the beating and exposure to cold.

*Clinical Lectures on Mental Diseases by T. S. Clouston, M. D., F. R. C., P. E., p. 406, (English edition.)

Dr. Clouston, in his work on *Mental Diseases*,* says:

Epileptic insanity, and by this I mean all morbid effects associated with the disease, occurs in connection with the fits in six chief ways:

(1.) After them. This is on the whole the most common, and the mental symptoms then seen are essentially periodic and paroxysmal, like the motor convulsions. They follow usually within twenty-four hours of the fit or fits. If there have been a series of fits, they are much more apt to occur than after one only.

(2.) Before the fits. They usually show themselves a day or two, rarely three or four, before a fit is coming on. And in such cases, when the fit occurs, the mental irritability, suspicions, impulsiveness, or confusion, usually disappear at once, their place being taken by a stupidity, or in some cases by normal mentalization. This is, undoubtedly, a strange fact, but is abundantly seen. The fit, like a thunderstorm, seems to clear the air.

(3.) Mental disturbance may occur, instead of the fits, taking their place, apparently coming on at the period when the fits might have been expected. This is rare, but very instructive. It is the *epilepsie larveé*, or masked epilepsy, of the French, and seems to favor Hughlings Jackson's explosion theory of epilepsy more than any other clinical fact observed in connection with the disease.

(4.) A slow, steadily-progressing loss of memory and change of affection, a blunting of the finer feelings, and a permanent mental obscuration or twisting, those being often the very first symptoms present, growing more intense the longer the patient lives, and takes the fits. This is, in fact, a dementia, either from brain injury by the fits, or from the natural advance, through the prolongation of the morbid brain state that caused the epilepsy.

(5.) Some forms of chronic insanity take the place of the fits, which cease altogether. I have seen only four or five cases where this took place, and they all occurred at the termination of the reproductive period of life.

(6.) Epilepsy may begin in the course of chronic insanity of many years' duration evidently through advance of disease from the mental into the motor centres of the brain. I refer to those cases of chronic insanity, usually dements, who become epileptic, beginning to take regular periodic fits after being many years insane, and then going on taking them regularly. I have seen about a dozen such cases, and now have five under my care.

*Clinical Lectures on Mental Diseases by T. S. Clouston, M. D., F. R. C., P. E., p. 397, (English edition.)

It will be seen that this last division exactly describes the connection between the insanity and convulsions in the case under consideration. I am aware that Echeverria does not incline to this belief, and says that in no instance has he known the epileptic disease to follow insanity, but Musset, Boileau de Castelnaũ and others admit that insanity does occasionally superinduce epilepsy, and it seems reasonable to suppose that the cerebral changes producing insanity may pass, as Clouston says, "from the mental into the motor centers of the brain," and thus result in epilepsy.

On the fourteenth of September, he had another attack which was similar though less severe. The foregoing information in regard to the convulsions, &c., is obtained from the records in the case book.

When I first saw him in October, the symptom which attracted my attention was the "echo," and upon inquiry I learned from an attendant, who had known him for years, that the symptom was not present until after the occurrence of the first fit. At the time mentioned it was very marked, and in reply to the morning salutation, he would almost invariably say: "Good morning, doctor, doctor, doctor! Good morning, doctor!" repeating the last word two or three times and sometimes, when the sentence was short, he would repeat it all.

On the eleventh of October, he again had another series of convulsions, which was severe. For twenty-four hours he was in *status epilepticus*, and had from a dozen to fifteen different convulsions, after which he became profoundly comatose. He lay in this condition for nearly seventy-two hours without taking nourishment of any kind, and then gradually emerged from it, after which he was dull and stupid for several days.

He was observed closely during the attack, and the first sign of returning consciousness was smiling. This continued at intervals for two or three hours, when he suddenly burst into loud and prolonged laughter. The attendant, when questioned about this, said that in each of the attacks he had noticed the same thing, and that he could tell when the patient was going to emerge from the coma by this fact. During the subsequent attack on the nineteenth of January, a careful watch was kept for this sign and it did not fail to appear.

Bristowe* says: "We have met with one case in which the patient always recovered laughing."

A few days after emerging from the coma, he was up and around the ward as usual, although quite dull. He was fault-finding and frequently complained of not having enough to eat. Immediately after leaving the table he would say: "I aint had anything to eat, eat in six months. You may not believe it, but it's God's truth, truth." This condition continued, with periods of volubility, in which the "echo sign" was very noticeable and, in which it became more and more persistent as the time for the development of another series of convulsions approached, up to the nineteenth day of January, when he was again attacked with convulsions, and went through precisely the same stages as previously described. On the ninth of the following April he was again similarly attacked and died. No autopsy was made, as the friends objected.

It will be seen that the convulsions occurred at periods of about three months, with one exception, that is when a slight attack occurred on the fourteenth of September. These seizures always began in the morn-

*The Theory and Practice of Medicine, by John Syer Bristowe, M. D., F. R. S., p. 1063 (English edition.)

ing or forenoon and were very similar in every respect. From the first of October, when he first came under my observation, until the time of his death, a period of a little over six months, the "echo sign" was marked and persistent. The following is a fair specimen of his conversation: "You want to keep, keep me alive as long as you can, as long as you can. I've been here seven years and I'll have to come here to the asylum if I live fifty years, fifty years, one year after another. It don't cost me a cent, cent. * * * * * What's the use of being born, born? Man's got to die, die, die. You can't take anything with you, and what's the use of being born, born, born, I say? * * * * * I'm better and I'm glad of it. Thank God! God! God!" The attendant in charge of him, a very intelligent man, says that during the night before an attack of convulsions he would invariably lie awake all night and talk without cessation, and, that he would repeat his words much more than usual. This was such an invariable occurrence, that the attendant whose room was directly opposite the patient's could always predict the attack. I was also particularly impressed by the fact that he would become more and more talkative for three or four days before an attack, and that the "Echo" would be more marked and persistent than at any other time. This sign, it is said, is much better shown in writing than in speaking, and I regret that in the case reported no written specimens could ever be obtained.

There is now in the asylum, a patient recently admitted, whose history would seem to corroborate the statement, for he manifests this symptom markedly in composition, although there is not the slightest evidence of it in speech. The following is a copy of a portion of a letter written to his sister: "Your ever welcome

letter was duly received, and with the usual welcome, and was gratified in hearing from you and to receive such, such a nice long letter from you. It was just received before dinner, and before dinner Mr. J——— was asking for you. I told him you was in Chicago, he told me you stopped here once or two times. I feel very lonesome here, I feel very lonesome for Lizzie and the baby, but they wont let a person go home without the consent of the person that sent them here. I want Lizzie to write to them and tell them to let me go home. I would be better to home. I am awful glad you are coming to R—— I hope I will be at home then and we will have a good time, and we will all go, baby and all. Write soon." The patient has been under observation too short a time to permit of any positive conclusions being drawn in regard to the relation which the symptom bears to the fits.

The above clinical facts and observations are presented on account of their connection with a line of investigation which has hitherto received but little attention. As Echeverria says:

> I would not exaggerate the diagnostic value of this symptom, since the repetition of the same sentence is also observed in other forms of insanity, not associated with epilepsy, although certainly not carried to such an excessive degree. The phenomenon seems to have attracted no attention, and I merely point it out on account of the assistance it may render to throw light on medico-legal cases.

A LECTURE ON THE RELATION OF MADNESS TO CRIME.*

BY J. C. BUCKNILL, M. D., F. R. S.,
Late Lord Chancellor's Visitor in Lunacy.

Perhaps no medico-legal question has been more discussed, and with fewer results, for the last forty years, than the one I have to introduce to you this evening. I have myself taken part in the discussion for nearly all that time, and yet it seems to me fresh and inexhaustible as ever. To say nothing of the mass of volumes, great and small, which have been written on it in this and other countries by men of my own profession, it has engaged and baffled the utmost acumen of the greatest lawyers. It was discussed at length in the House of Lords in 1843. It was argued with the utmost ability by the greatest criminal judges before the Select Committee on the Homicide Bill in 1874; and, again, by the Royal Commission of eminent judges on the Criminal Code Bill in 1879, who declared it to be a "very difficult subject"—so difficult, indeed, that they saw no way out of the difficulty by any definition of insanity which would be both safe and practicable. It has been discussed in two important papers by the late Chief Justice Cockburn, published by order of the House of Commons; and lastly, it has been fully and ably discussed in the second volume of Sir James Stephen's recent edition of his *History of the Criminal Law of England.*

Sir James Stephen, now one of the justices of Queen's Bench, has made the criminal law his own subject. No

* Delivered at the London Institution, February 28, 1884.

other person can speak with anything like his minute literary knowledge of it, and his practical knowledge also has been most wide and varied. The author of the Indian Criminal Code, and of the Homicide Amendment Bill, and one of the Royal Commissioners on the Criminal Code Bill, his special knowledge is unequalled, and all that he has to say on the subject commands the highest respect.

I do not propose this evening to enter at large into the medical aspect of this question—to discuss the nature of the diseases which cloud the reason, or to make any attempt to unravel those trains of deranged emotion and thought which they occasion. What I do propose to show you is that the state of the law of insanity as regards crime, when life is at stake, is as imperfect as the state of the law of homicide and murder generally, of which it forms part, and that, in the words of the Select Committee, "a new definition is urgently needed to rescue the law from its present discreditable state;" for, as they say in their report, "if there is any case in which the law should speak plainly, without sophism or evasion, it is when life is at stake; and it is on this very occasion that the law is most evasive and most sophistical."

What is insanity? Medically, it is a disease of the brain affecting the mind. Formerly, medical men recognised only the grosser forms of madness. Dr. Willis, lecturing to the College of Physicians in 1822, recognised only two conditions or varieties of madness, namely, the high and low state—mania and melancholia.

Now medical men recognise a great variety of forms and degrees of insanity, and physicians do rightly endeavor to recognise the earliest and slightest forms and degrees of insanity, because these forms and degrees are the most curable, and to cure insanity is the

physician's especial duty. The physician must, therefore, observe the causes of insanity in order to remove them. But the duty of the lawyer leads him to neglect the causes of insanity, and to regard almost entirely its consequences, in order to ascertain the influence of insanity upon the conduct. Conduct is the outward expression of the mental state; but insanity is frequently of such kind and degree, that it does not influence the conduct so as to make the insane man break the law; and thus it becomes the lawyer's task to discriminate between insanity which makes a man break the law from that which does not. It is admitted that man is not responsible for breaking the law, if his action in so doing be helpless. It is admitted that by responsibility is here meant punishability, and that the punishability of an offender is strictly a legal question to be determined by lawyers, physicians as such having nothing to do with it. But physicians who are conversant with the insane, and who know their characteristics, who can distinguish the forms and degrees of the malady, their causes and consequences, can instruct lawyers so as to enable them to distinguish the different kinds of insane persons, and the different kinds of their conduct; to distinguish that conduct which is the result of insanity from that which is not the result of insanity —that which they can help, and for which they are therefore punishable, from that which they can not help, and for which they are therefore not punishable.

The physician must distinguish, as the lawyer and the public do, between slight medical forms of insanity and grave legal forms of insanity. The definition of medical insanity as disease affecting a man's mind, he must, therefore, supplement with a medico-legal definition. Definitions of insanity are most difficult and arduous. They are either too narrow, and become

meaningless, or too wide, and the whole human race are involved in the drag-net. According to the *Times*, July 22d, 1854, Lord Blackburn said: "I have read every definition of insanity which I ever could meet with, and never was satisfied with one of them, and have endeavoured in vain to make one satisfactory to myself. I verily believe that it is not in human power to do it."

Since this was said before the Select Committee on the Homicide Law Amendment Bill in 1874, Mr. Justice Stephen has attempted a definition as follows: "Sanity exists when the brain and the nervous system are in such a condition that the mental functions of feeling and knowing, emotion, and willing, can be performed in their regular and usual manner. Insanity means a state in which one or more of the above-named mental functions is performed in an abnormal manner, or not performed at all, by reason of some disease of the brain or nervous system" (page 130). But this is a medical definition, covering the slightest deviation from mental health arising from hysteria or alcohol, from bile or gout. It includes states of feeling as sensation, which may not affect the mind. It includes abeyance of mental functions, which is not insanity; for, when the mental functions are not performed at all, there is no insanity.

It is clear from the context that this definition of insanity would include more than Mr. Justice Stephen could allow to be irresponsible; and no good is gained by thus analysing the mind, and detailing the results of the analysis, more or less complete, as functions which may be separately affected. I shall myself venture to make one more medico-legal definition of insanity, *Insanity is incapacitating weakness or derangement of mind caused by disease.* It seems to me to be practically

useful and scientifically accurate to make a distinction between weakness and derangement of mind. It seems to me also that all insanity which is not weakness will fairly come under the head of derangement in its widest sense; for morbid states of the emotions derange the play of mind. But the all important term in the definition is, of course, the attribute which points to the want of power to do something. In criminal inquiries, it means incapability of abstaining from the criminal act. It means that condition of irresponsibility pointed to by Lord Bramwell in Dove's trial—Could he help it? It means that which has been much insisted upon by medical writers and great legal authorities, the loss of self-control. Lord Chief Justice Cockburn and Justice Stephen have both expressed the strongest opinion that this state of mind caused by insanity ought to remove responsibility.

Other judges, however, have raised strong objections to the term loss of self-control, and not, I think, without reason. As a matter of fact capable of proof, there is more or less of self-control in the condition of the insane, and more or less loss of self-control in the conduct of sane criminals. But the term incapacitating is less dubious. If a man have such mental disease that he is incapable of obeying the law, that man clearly ought not to be punished by the law. Justice Stephen says, "To threaten such a man with punishment is like threatening to punish a man for not lifting a weight which he can not move" (p. 172).

In the relations of law to insanity, the question of capacity or incapacity seems always to be involved. In inquisitions, the question is whether a man is capable of taking care of himself and his affairs; in probate cases, the question is whether a man was capable of making a reasonable will; and in criminal trials,

whether a man was capable of avoiding the compulsion of disease to crime.

Incapacity therefore is, and must be, the real test of irresponsibility, for otherwise the law would be both foolish and cruel. This principle of law being granted, the working law must go further, and declare what shall be held to constitute incapacity. It does so in other respects, for instance, it declares that a child of such tender years that it has no discretion is not punishable, and that a man under absolute compulsion of any kind is not punishable.

With regard to insanity, the judges have laid down rules, by which they attempt to distinguish an insane offender who is capable of avoiding his offence from an insane offender who is incapable of avoiding his offence on account of mental disease. These rules which constitute the law of insanity in relation to crime, have varied from time to time. They reflect, more or less, the knowledge of the age in which they are made. From the nature of the case, they can not precede the knowledge which men have of nature; and the knowledge which men have of the nature of disease has been very slowly acquired, and is still far from perfect. The drugs and the instruments they used but a few years ago are now curiosities, only to be met with in museums; and new discoveries which invalidate old beliefs are still frequently made. Alteration of the law follows slowly in the wake of increasing knowledge; but still it does follow and change as knowledge advances; and I have no doubt that, when the knowledge of insanity possessed by physicians can be shown to be complete, the law of insanity will, after more or less delay, due to professional conservatism, be brought into reasonable agreement with it.

Lord Coleridge, not long ago said in court that "to adhere too persistently to the old law is to forget that law grows; and that though the principles of law remain, yet it is one of the advantages of the common law that these principles are applied to the changing circumstances of the time."

No circumstance of the time is so changing or so important as the knowledge which man possesses of the operations of nature; and in no special field of knowledge has this circumstance been more changing or more important of late years than in the pathological explanations of insanity. Unfortunately, theory has oftentimes outrun, obscured, and discredited knowledge; and it is therefore not surprising that the powerful and responsible officials who administer and alter the common law should refuse to make changes, of the reason and necessity of which they have not been convinced.

But we must no longer delay to inquire what the law is. I may fairly claim to omit any reference of its earlier phases, and to come at once to that important statement of the law as it was made by fourteen out of the fifteen English judges in reply to questions put to them by the House of Lords after McNaghten's acquital on the charge of the murder of Mr. Drummond in 1843. I have the text here, but it would take too long to read *in extenso.* The first and the fourth questions and answers refer to delusion. McNaghten, you may remember, shot Mr. Drummond under the influence of a delusion. The judges declare, with regard to delusion, that it is law that the accused is in the same situation as to responsibility as if the facts with respect to which the delusions exist were real. For instance, he might kill a man whom he madly thought to be going to kill him; but if he killed a man whom he madly thought to have inflicted any injury upon him, it would be

murder. The second and third questions and answers deal with the terms in which the prisoner's state of mind at the time when the act was committed ought to be put to the jury; and in these the law of responsibility is tersely declared thus.

"To establish a defence on the ground of insanity, it must be clearly proved that, at the time of committing the act, the accused was laboring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong."

This is regarded by the great majority of the judges as the law, and the whole law, on the subject-matter; and I think that the contention of Lord Chief Justice Cockburn and of Mr. Justice Stephen, that it is only such part of the law as sufficed to answer the questions of the House of Lords, leaving other important portions of the law unexpressed, can not be maintained, for the following reasons:

1. It does not appear that the fourteen judges who concurred in answering the questions of the Lords felt any disinclination to expound the law fully in what has been called an extra-judicial judgment. One judge alone, Mr. Justice Maule, did appear to entertain an objection, and, in consequence thereof, he made separate replies, saying as little as he could.

2. The questions were formulated by members of the House of Lords, who were themselves great lawyers, for the evident purpose of eliciting an explicit declaration of the law.

3. One of the great judges who took an active part in framing the declaration of the law, has left it on record that he meant it to be a full exposition of the law. This was Lord Wensleydale, replying to Mr. Wadding-

ton's question before the Royal Commission on Capital Punishment. "You do not think that the sort of insanity which exempts a person from capital punishment in case of murder could be more accurately defined to the jury than it is in the resolutions of the judges in McNaghten's case?" To this, Lord Wensleydale replied: "I do not think it can. I entirely concurred in that judgment, and took a share in the preparation of it, with my late excellent friend, Chief Justice Tindal, who took very great pains, I know, to lay down the law, most correctly. I have always acted upon it, and I think it quite right. Whether it could be improved in any respect, I am not prepared to say until this objection shall be made and discussed."

4. Mr. Justice Stephen, who more than anyone contends that the law was, on this occasion, insufficiently expressed, and who maintains that its strict enforcement would lead to "monstrous consequences," fully admits that it is practically the law of the land. "It has been the general practice ever since," he says (p. 153), "for judges charging juries in cases in which the question of insanity arises, to use the words of the answers given by the judges on that occasion. It is a practice which I have followed myself on several occasions; nor, until some more binding authority is provided, can a judge be expected to do otherwise, especially as the practice has now obtained since 1843."

5. And, finally, it is the latest exposition of the law in this country, and in this city, for in two trials at the Central Criminal Court, in its sittings last autumn, this law was declared to the jury in its most unconditional simplicity.

On the trial of William Gouldstone, before Mr. Justice Day, for the murder of his five children, the jury were charged that "if the prisoner, at the time he killed the

children, knew the nature and quality of the act he was committing, and knew that he was doing wrong, then he was guilty of wilful murder. The nature and quality of the act meant that the man knew what it was that he was doing, that is to say, that he knew he was killing a fellow-creature. He repeated that, if a man killed a fellow-creature, knowing at the time he was doing wrong, then he was guilty of wilful murder."

At the next sittings of the Central Criminal Court, on the trial of James Cole for murder, Mr. Justice Denman told the jury that "to prove the prisoner was not responsible, it must be shown that he was suffering from such a state of mental disease as not to know the nature and quality of the act he was committing, or that it was wrong." In passing sentence of death upon James Cole, Mr. Justice Denman further said: "An attempt has been made to make out that you were irresponsible; that attempt has failed, and I must express my opinion that, according to the law of England, it has rightly failed. Although it was, I think, established in evidence that you had been suffering from delusions, I can not entertain a doubt that on the occasion on which you violently caused the death of your child, you knew you were doing wrong, and knew that you acted contrary to the law of this country, and that you did it under the influence of passion, which had got possession of your mind from want of sufficient control, the result being that the poor child came by a sudden and savage death."

The language of this sentence is remarkable as showing with what exact fidelity the judges of the present day adopt and administer the law of their predecessors as it was declared to the House of Lords; namely, that notwithstanding the existence of delusions (the delusions were that he was being poisoned, and that men

were hid under the floor and in a cupboard to injure him), the prisoner is punishable if he knew that he was acting contrary to the law of the land. Mr. Justice Denman's language is further remarkable from his employment of the term control. He inferred, not the innocence, but the guilt of a man suffering from delusions, from not having exercised sufficient control over his passion.

Such being the law, so established that the judges can not be expected to do otherwise than to use the very words of it in charging juries, let us now devote a little time to the inquiry of what the judges themselves think of it; and first let us hear what some of the judges say who approve of the law. The first I shall cite is Lord Blackburn, Chairman of the Criminal Code Bill Commission in 1879, which Commission was satisfied with expressing the existing law with but slight verbal alteration, namely, the change of "not knowing the nature and quality of the act" into "incapable of appreciating the nature and quality of the act." In his evidence before the Select Committee on the Homicide Law Amendment Bill, 1874, Q. 276, Lord Blackburn gave some details of a trial in which "he felt it quite impossible to say that the prisoner ought to be punished, although, on this definition, you would be obliged to say she was guilty." Therefore, he says: "I told the jury that there were exceptional cases, and on that the jury found her not guilty on the ground of insanity, and I think rightly."

But what does this exceptional case of Lord Blackburn's mean if it does not mean that, if you put the law in force, you will hang innocent people.

I, also, in the course of a large experience, can call to mind another exceptional case which is the converse of Lord Blackburn's. I can remember one case, and one

only, of a lunatic on trial for murder, who really did not know the nature and quality of the act which she had committed. It was that of a maniacal woman who had drowned her two children in the Exeter Canal. She was so mad when placed in the dock, that Mr. Justice Coleridge, father to Lord Coleridge, saw that she was unfit to plead. He sent for his brother judge from the Nisi Pirus Court, and well I remember seeing the two judges standing in their robes of different colour, and talking low to each other as they looked at the prisoner, and formed their own judgment of her mental state, and Mr. Justice Coleridge ordering her removed to the county asylum. Before the next assize she had completely recovered, and I again received an order to produce her in court, and Mr. Justice Coleridge (for he again was the judge), without taking any evidence, directed the jury to find a verdict of Not Guilty, on the ground of insanity; and, upon that verdict having been given, he ordered her to be given to the care of her friends. I fancy this procedure was not quite regular, but it was most sensible and humane, for she was innocent and she was sane.

The case supplementing Lord Blackburn's, which did not come within the law, goes to prove that, when a prisoner is so mad as actually to come within the definition of the law, the formalities of the trial may be superfluous.

Again, before the same Select Committee, Lord, then Baron, Bramwell said: "I think that, although the present law lays down such a definition of madness, that nobody is hardly ever mad enough to be within it, yet it is a logical and good definition." I know not how it can be logical to make a law of exemption which exempts nobody, or how a definition can be good which includes nothing. But Lord Bramwell's judgment of

what, using the words of the law, we may fairly call the nature and quality of the law, will be fully endorsed by every one who really knows lunatics and the motives of their conduct. "Nobody is hardly ever mad enough to be within it." It would be impossible to invent a more sweeping condemnation of the law than is expressed in that pregnant sentence.

And now let us hear what those judges say who do not approve of this law. The late Lord Chief Justice Cockburn, in his memorandum, July 8th, 1874, on the Homicide Law Amendment Bill, says: "I concur most cordially in the proposed alteration of the law, having been always strongly of opinion that, as the pathology of insanity abundantly establishes, there are forms of mental diseases in which, though the patient is quite aware that he is about to do wrong, the will becomes overpowered by the force of irresistible impulse. The power of self-control, when destroyed or suspended by mental disease, becomes, I think, an essential element in the question of responsibility." In his memorandum of June 12th, 1879, the Chief Justice, criticises the law of the Code Bill, which repeats that of the fourteen judges. He says that the language of the essential sentence, namely, that the accused did not know the nature or quality of the act, or that it was wrong, is loose and uncertain; and that it is "language not the less loose and uncertain because it is used by learned judges." Wrong, he thinks, must be understood to mean legally wrong; but what is meant by the nature and quality of the act, he says that he really does not know. To this and to much more criticism he subjected the law, so as to leave no shadow of doubt that he thought that law insufficient and bad.

Now hear what Mr. Justice Stephen says, not when he was contending for his Amendment Bill, but since

he has become a justice of the Queen's Bench. How much he may feel himself at liberty to declare the existing law to be a downright bad law, I do not know; but I observe that, as one of the Royal Commissioners on the Criminal Code Bill, he says that a judge "is bound to decide in accordance with principle already established, which he can neither disregard or alter, whether they are to be found in previous judicial decisions, or in books of recognised authority, and that, in consequence, the elasticity of the law is much smaller than it is often supposed to be." (Report, p. 7). I suppose, therefore, that, as a judge, the expression of his opinion is under some restraint.

In his great work on the *History of the Criminal Law*, vol. ii, Mr. Justice Stephen declares his opinion that the "law of England on this subject is insufficiently expressed." (p. 128). Respecting delusions, which, he says, may interfere more or less with every function of the mind, which falsifies all the emotions, alters in an unaccountable way the natural weight of motives of conduct, weakens the will, and enfeebles every part of the mind, he declares that "upon these questions the answer of the judges throws no light at all, because it assumes the man to be insane in respect of his delusion only, and to be otherwise sane; in a word, the prisoner is treated as a sane person under a mistake of fact for which he is not to blame." (p. 157).

With regard to the emotions and the will, he says: "If the answers were meant to be exhaustive, they certainly imply that the effect of insanity, if any, upon the emotions and the will is not to be taken into account in deciding whether an act done by an insane man did or did not amount to an offence; but they do not explicitly assert this, and the proposition that the effect of disease upon the emotions and the will can

never, under any circumstances, affect the criminality of the acts of persons so afflicted, is so surprising, and would, if strictly enforced, have such monstrous consequences, that something more than an implied assertion of it seems necessary before it is admitted to be part of the law of England." (p. 159).

Again, he says that, "carefully considered, [that is the judges' answers] leave untouched the most difficult questions connected with the subject, and lay down propositions liable to be misunderstood, though they might, and I think ought, to be construed in a way which would dispose satisfactorily of all cases whatever." The propositions, as construed by Mr. Justice Stephen, certainly offer a remarkable example of legal dialect. Thus construed, wrong may mean either illegally or morally wrong, and knowledge may mean a calm judgment of the circumstances and consequences of the act. If it be really possible to construe the propositions of the judges as Justice Stephen thinks they might and ought to be construed, I can well believe that "to read judicial decisions correctly is," as he says, "an art in itself, to be acquired only by long professional practice, aided by rules well known to lawyers, but unknown to medical men." But I am happy to say the art of construing does not satisfy the sound common sense of Mr. Justice Stephen, who concludes his efforts in that direction by a distinct proposition of his own as to what ought to be the law of England, which is as different as well can be from that which is the law.

I have come then, to the end of this part of my task, and I claim to have proved, not from the theories and imperfect knowledge of medical men, but out of the mouths of the great judges of the land, that the law of the land is, to use one of their mildest terms, "insuffi-

ciently expressed;" and, to use a stronger term, that, if strictly enforced, it would lead to "monstrous consequences." It would, indeed, lead to frequent acts of the most cruel injustice. With much pleasure, I now pass with Mr. Justice Stephen to the consideration of what the law ought to be. He says:

"The proposition, then, which I have to maintain and explain, is that, if it is not, it ought to be the law of England, that no act is a crime, if the person who does it is, at the time when it is done, prevented, either by defective mental power or by any disease affecting his mind, from controlling his own conduct, unless the absence of the power of control has been produced by his own default."

I entirely agree with the idea contained in this proposition, but I think it would be difficult to put a good and true idea into language more open to dispute. What is meant by defective mental power which is not conditioned by disease? Is it mere folly which is meant, or is it idiocy? which, as Chief Justice Cockburn pointed out, is omitted from the present law. "No provision is made for original mal-organisation; in other words, for idiocy." (Memorandum, 1874). What is meant by "the absence of the power of self-control, produced by the prisoner's own default?" If states of intoxication be meant, they ought to be specified. But if states of real insanity, caused by evil habits of life of any kind, are meant—as by the context I am led to suppose—then the proposition is, in this respect, impossible to act upon. Moreover, the phrase "prevented from controlling his own conduct," is liable to objection, and has, indeed, been objected to by many judges, and has not been a little worried by Mr. Justice Stephen, himself. How can it be said with accuracy that a man controls his conduct when he refrains from

a crime, and does not control his conduct when he commits one? Mr. Justice Denman, as we have seen, condemned James Cole on the ground that he did not control his conduct. Surely, the most undoubted lunatic, who purposes and plans and executes the most insane homicide, does control his conduct, though in an insane fashion, as the same man who is tempted to crime and refrains from it controls his conduct sanely, from higher or lower motives of duty or selfishness. For my part after having long used the term "loss of self-control" in this relation, I give it up as altogether too loose, ambiguous, and inaccurate for so grave and precise a purpose as the definition of responsibility. There are many more definite terms to choose from: incapable, unable, compelled to, can not help, helpless, can not avoid; and of these the first seems as good as any, and it is used in the Criminal Code Bill: "incapable of appreciating." I would suggest therefore the following simplification of Sir James Stephen's proposed law of England as it ought to be. *No act is a crime if the person who does it is at the time incapable of not doing it by reason of idiocy, or of disease affecting his mind.* I know not whether Lord Blackburn would think that this definition would be leaving the question "too much at large," as he said; but surely it would be better than any definition which would leave exceptional cases to be provided for. I think it ought not to be objectionable to Lord Bramwell, who, when trying a lunatic who was also an abominable villain, put the law into a nutshell when he said that the real question was, "Could he help it?"

It contains no medical theories or views, but is wide enough to contain all medical knowledge, and is yet definite enough to meet the practical requirements of the lawyers; and it is, I believe, entirely in accordance

with Mr. Justice Stephen's own line of thought as to the principle of the needful amendment of the law, although it is expressed more simply and tersely than his own proposition of what the law ought to be.

Having come to this conclusion, I must still crave your indulgence for a short time, while I make some remarks upon procedure, *i. e.*, upon the manner in which the law, as it stands, is administered, and add some suggestions perhaps as to its possible amendment. In this country, the questions of the commission of a crime and its excuse on the plea of insanity are, as you know, the joint subjects of our judicial investigation at the trial of the prisoner. But this is not the case in other countries; notably it is not the practice in France, where the code of procedure enacts that when the magistrate during the examination perceives, or is informed by attested certificates, that the person accused of crime does not enjoy the full measure of his intelligence, he is to suspend his examination, and to make an order by virtue of which one, two, or three experts are requested to examine the accused. These experts having been sworn, examine into the particulars of the crime, and the prisoner's history, and they examine the prisoner himself as often as need be, either in prison or elsewhere; and they can even have him removed to a lunatic asylum for the purpose of prolonged observation. If they report that the prisoner is insane, the magistrate generally accepts their verdict as final, and issues an order of *non lieu*, or no jurisdiction. It is upon the report of these experts, or on the report of another set of experts whom the court has the power of appointing if not satisfied with the first, that it depends whether the trial for the crime itself does or does not take place. But at the real trial, the question of irresponsibility can not be raised. Practically the

same system prevails in Austria and some other continental countries. In a remarkable paper on insanity as a defence for crime, read by Mr. George B. Corkhill, United States Attorney for the District of Columbia (every one will remember Guiteau's abuse of Corkhill,) read last year before the Medical Society of New York, this most experienced prosecutor says:

"My candid opinion, resulting from a very large experience in the trial of these cases, is that, when a prisoner proposes to defend his crime on the ground of insanity, a jury specially selected for their fitness should be chosen to try the special plea; and, if the prisoner be found insane, then he should be confined in an insane prison for a time commensurate with the character of the crime; and, if the verdict of the jury be in favour of his *sanity*, then the plea should not be allowed upon the trial of the cause." (P. 219.)

At the last annual meeting of the English Medico-Psychological Association, which is composed mainly of the superintendents and other medical officers of lunatic asylums, a resolution, proposed by the President, Dr. Orange, was adopted, recommending a medical examination of persons supposed to be insane before the trial. This examination, it was proposed, should be made in each county by the surgeon of the county gaol, the superintendent of the county asylum, and one other local medical man; and their joint report should be given to the counsel for the prosecution. I see many objections to this proposal. Among others, I feel sure that the examiners indicated would not always be competent to the efficient discharge of their difficult task. Our procedure, as you are aware, does not provide for any official examination into the prisoner's mental state before the trial, although an unofficial one does frequently take place in his behalf;

but a prisoner is put upon his trial with no official provision for his defence beyond the nomination of a counsel by the judge, if one have not been provided by the prisoner or his friends. If he should have no friends and no means, I am not aware of any manner by which he will be provided with the services of a solicitor, or in what manner evidence can be sought for, or witnesses summoned for his defence. It is true, in criminal trials, the witnesses for the prosecution are expected to tell the truth without reservation or prejudice; and consequently, in these days, there is no great danger of a man being found guilty of a murder which he has not committed, however poor, friendless, and undefended he may be. But the absence of pecuniary resources or personal interest in the defence of an insane prisoner is very likely to occasion, and, there is no doubt, frequently has occasioned, a wrong verdict, with the chance of being remedied in an irregular fashion by the Royal prerogative of mercy, or the other chance of being hanged in ignorance and mistake.

Lord Sidney Godolphin Osborne, the well known "S. G. O." of the *Times* columns, expressed a strong opinion on this matter to the Royal Commissioners on Capital Punishment, an opinion founded upon his large experience as a prison-chaplain. He said: "I am satisfied that we have hanged many insane people; and that we have let off, on the ground of insanity, very many who were never anything but sane."

The late Dr. Swaine Taylor, also, who had great experience of medico-legal trials of all kinds, entertained and expressed a very strong opinion on the great uncertainty which attaches to the trial of insane criminals, arising from the different degress of publicity and interest which the offence or the trial has excited.

Indeed, we may see that it must be so, if we reflect that the lunatics who commit murders are usually those who are afflicted with some kind of madness the signs of which have not been easily observed, so that they have been left at large instead of being confined in asyulms. I have known some instances in which madness has for the first time been discovered at the trial. We need, therefore, be little surprised that a number of persons are condemned to death for murder who have to be reprieved by the Home Secretary on the ground of insanity, or that the cause of these reprieves is, to a great extent, accidental. Take for instance, the two men already mentioned, who were tried for murder at the Central Criminal Court last autumn, William Gouldstone and James Coles. Respecting the first case, Dr. Savage of Bethlem wrote a letter to the *Times;* and, respecting the second case, Dr. Jackson of Thorn Heath also wrote to the same journal, demanding further inquiry. Each of these gentlemen had personal knowledge of the condemned man, of whose insanity and irresponsibility he was convinced. The medical press and some organs of the general press of this metropolis backing up these opinions, the Home Secretary was moved to order a medical investigation, with the result that both of these men were reprieved on the ground of insanity, and removed from the condemned cell to the care and protection of Broadmoor Asylum.

There can be little doubt that, if these men had been tried in some remote county, and had not attracted the attention of eminent medical men with knowledge of the subject, and spirit to assert their opinions, both of them would have been executed; for the terms in which they were sentenced render it impossible to believe that the judges could have interfered. Indeed,

I understand that it is quite an unusual thing for a judge to interfere.

The late Baron Martin is said to have communicated with the Secretary of State about Victor Townley, whom he had condemned, and which was thought quite unusual. Another judge to whom I myself wrote, suggesting inquiry into the mental state of a prisoner whom he had sentenced, replied to me that it was contrary to custom and etiquette for the judge to approach the Secretary of State on that regard.

I suppose that, if a judge had a strong opinion that a prisoner he had condemned was really not responsible, it would be his bounden duty to convey his opinion to the executive. I can not readily believe that it can be otherwise, but I do not know, as a fact, that it is so. If the judge had not a strong opinion, I suppose he would let the responsibility for the verdict and its consequences rest upon the heads of the jury. With regard to the Home Secretary, he may be moved by individuals or by the press. I have moved him myself on several occasions in both ways; but I understand that he requires to be moved to consider whether it is right for him to order an inquiry. There is, I believe, no one whose duty it is to call the attention of the Home Secretary to any man lying under sentence of death, respecting the grounds for supposing him to be irresponsible from insanity. If there be such a person it should be known, in order to remove in some degree the unpleasant conviction that these proceedings are in the highest degree fortuitous, depending mainly upon the accident of public interest, or rather of the interest of private individuals capable of forming a rough judgment as to the need and justice of an inquiry.

Surely it ought to be the duty of some responsible official to look into the circumstances of every trial in

which sentence of death has been passed, and to state whether there be any *primâ facie* ground for the supposition that the condemned man was not responsible on the ground of insanity.

Up to the present reign, the list of persons sentenced to death at each sitting of the Old Bailey was presented to the king in council as the recorder's report, and it was then and there carefully gone through by the king and his council, and who was and who was not to be executed, was considered and decided. (Stephen, 88.)

The whole burden of this momentous decision is now placed upon the shoulders of the Home Secretary. When this powerful minister has been moved to think it right to order an inquiry into the responsibility of a condemned man on the ground of insanity, he entrusts the inquiry to the medical superintendent of the Criminal Lunatic Asylum at Broadmoor, conjoined with whom is one of the medical officers of prisons.

It would be pleasing to know that the report, that these gentlemen are not paid for their services, is untrue. Those who dispense the Queen's justice are not without their reward, and those who determine the incidence of the Queen's mercy ought not to go without the wages of anxious and difficult work.

I do not know that the order of the Home Secretary is imperative and binding, though I think that it ought to be; for surely it is best to make action in which life or death is in the balance as little voluntary as possible. The order, at least, is obeyed, and the condemned man's mind examined for the first time, it may be, with thoroughness and skill. An ignorant or perfunctory examination of a criminal supposed to be insane is worse than useless; but a systematic examination conducted by skillful and experienced examiners will almost certainly make known the real condition of a man's

mind, especially if he be insane. I am not so sure, however, about a sane man who cunningly pretends to be mad.

It must be remembered, however, that this examination takes place some time, often several months, after the murder has been committed, and when the man's state of mind may have more or less changed. The examiners therefore must take into consideration all the circumstances of the crime as signs or symptoms of the mental state which prompted it. They may inquire, moreover, into the conduct of the prosecution and of the defence. Sometimes they may find that the prosecution was unfair so far as the presentment of the mental facts was concerned; sometimes that the defence was weak, ignorant, and casual, some inexperienced barrister having been appointed to conduct it on the spur of the moment, with no evidence on which to rely. And I do not know that they are even debarred from considering the terms in which the judge declared the law in his summing up. And these terms may vary greatly, even to the length of a rope.

The examiners embody their opinion, with the grounds for it, in a report to the Home Secretary, who, so far as I know, invariably acts upon it. If a reprieve be granted, and the condemned man be sent to Broadmoor, or to Pentonville, it can not accurately be said that the Sovereign has exercised the prerogative of mercy; for the Home Secretary and his examiners in these proceedings constitute an informal court of appeal, or an appeal which is not a court, and the decision of this is a reversal of the sentence of the court below on the ground of its injustice. But, court or no court, these proceedings ought not to be kept a secret. It is to my mind monstrous that the reports of these medical examiners, upon which the Home Secretary

stays the action of the criminal law, should not be made public.

Moreover, although the greatest confidence may rightly be placed in the examiners, still I maintain that, acting as they do in these inquiries as witnesses, they ought to give their evidence under the same sanctions and conditions as are imposed upon witnesses generally, and which are imposed upon the medical experts who are employed to examine criminals who are suspected to be insane, in France and other continental countries. They ought to make their examinations, and report under oath, and be subjected to cross-examination thereupon.

Surely it is in the highest degree inconsistent that medical opinion, which is placed under such stringent limitations and restrictions in criminal courts, should be so implicitly accepted, without any test of its validity, in the proceedings which reverse the decisions of those courts.

Moreover, as the judge in this informal court, namely, the Home Secretary, is not always a lawyer, and still less frequently a criminal lawyer, it would seem to be adding the climax to the informality and insufficiency of the proceedings that he should act upon the evidence of the medical examiners without the aid of a judge to advise or determine the relevance or bearing of that evidence in regard of the law. The most simple and efficient change in all these respects would probably be to transfer the whole of these proceedings to a limited court of appeal.

But, if it be desired to keep up the fiction of the exercise of the royal prerogative of mercy in these cases, through the action of Her Majesty's Minister, then, at least, let her Majesty's Minister provide himself with the aid of professional knowledge upon the determination of a question which her Majesty's

servants, the judges of the land, are agreed in considering one of the most difficult in the range of their duty.

It is scarcely needful to say that my comments do not apply to the action of any individual Home Secretary past or present. It is the system which I criticise. The judges, I am surprised to find, prefer the system which makes them, as Lord Bramwell says, automatons as to the extreme sentence of the law, and leaves the determination of its execution to the executive. On this account, they object to the restoration of their once discretionary power of recording sentence of death, which means the option of inflicting secondary punishment. But for the judges to have vast pains and troubles in their endeavours to settle a reasonable law of insanity *quoad* responsibility, and to labour with patient industry and care to put that law into execution, and then, without remonstrance or disapproval, to see the result of it all snatched from their hands by a secret and unjudicial proceeding, is an inconsistency which would scarcely be credible if it did not exist.

I trust that I have convinced you that, if the law on this matter is bad, the procedure is worse. It only continues to exist because its most important action is taken in secresy. Once let the report of the examiners be published, and the formalities and sanctions of judicial investigation will necessarily be imposed. The only instance I can call to mind in which the report of such an examination was not kept secret, was that upon George Victor Townley, in whose examination I assisted and the report of which I wrote. The Home Secretary published this report in the newspapers, with the effect of at once allaying a distressing controversy. Whether the examination into the mental facts take place before

or after the trial, there can, I think, be no real doubt that it ought not to be secret, or loose and diffuse as to its scope, or the evidence elicited deprived of the usual sanction of fidelity, or released from the test of professional examination as to its real purpose and accuracy, or carried on under no superintending authority.

I do not expect that my comments will be objected to by the experienced and competent examiner who is now employed, for he has himself proposed to the association, over which he is president, the change to an examination before the trial by other examiners. To this change one great objection, in my opinion, is that it would exclude his own services.

I have no objection to an unofficial examination before the trial on behalf of the prisoner, with the concurrence and consent of his solicitor; and a man put on trial for his life ought to have a solicitor, however poor he may be. A solicitor is really more important in such defences as we are considering, than a counsel, for he can collect and prepare evidence. The greatest objection to an examination forerunning the trial is that it would be almost impossible to prevent it from eliciting confession of the deed, which would often be embarrassing and contrary to the spirit of our law (although, in France, as you may know, confession is encouraged or provoked.) A solicitor for the defence would decide whether this danger existed or not, and would have a mental examination instituted or not, as he thought best for his client. An official examination, forerunning the trial, which had the misfortune to elicit a confession fatal to the prisoner would, I think, be condemned by English opinion. I do not know what legal right the prosecution or the executive has to order the examination of a prisoner committed for trial.

The examination of a man who has already been condemned to death for murder, and the formation and expression of an opinion as to whether he is insane in such a manner or degree that he ought to be reprieved, or not so, and therefore ought to be executed, imposes such a burthen of responsibility, that it ought not to be laid upon any man without those easements in the discharge of duty which lighten the responsibility of all who take part in judicial investigations.

From every consideration, therefore, of judicial method and consistency, the present mode of dealing with condemned men suspected of insanity, ought to be abolished, and a systematic investigation by sworn examiners who should give public evidence subject to cross-examination, under the control of a judge, should be substituted.—*British Medical Journal.*

CRIMINAL RESPONSIBILITY OF THE INSANE.*

BY ORPHEUS EVERTS, M. D.,
Medical Superintendent Cincinnati Sanitarium, College Hill, Ohio.

It has been, and is now, held by the law-courts, British and American, that every member of society capable of inflicting an injury upon another, with knowledge and purpose, is responsible and punishable for criminal acts.

Under such holding of the courts, infants and idiots are, by nature, exempt from such responsibility.

Of all other classes, such of the insane, and such only, as by reason of disease have become incapable of conceiving or entertaining a purpose, or of anticipating the ordinary, expectable, consequences of an act, are held by the same courts to be irresponsible for criminal conduct.

To such holding of the law-courts, or so much thereof as pertains to the insane, limiting their exemption from responsibility by degrees of mental impairment affected by disease, or measuring the responsibility of insane persons, at any given time, by existent qualifications of knowing and willing; however impartial it may appear when carefully considered; exception has been taken by certain persons, in the name of science, and an appeal, purporting to be in the interest of humanity, has been, and is being, urged, demanding a modification of opinion and ruling on the part of the courts, and an exemption from responsibility of the insane as a class.

*Read at the Annual Meeting of the Association of Superintendents of American Institutions for the Insane, held at Newport, R. I., June 26, 1883.

It is claimed by those who have thus excepted and appealed—persons more or less distinguished by their special interest in the phenomena of mental disorder, and the welfare of the insane—that such a limitation is too rigid and exacting; that it is unjust as well as cruel, and unscientific as well as inhumane. They maintain, in fact, the total incompetency and irresponsibility of the insane as a class, without regard to special qualifications, or degrees of impairment.

This ground, however "untenable under fire," might be safely disregarded by the more thoughtful, or left to be voluntarily abandoned by those who have been so far misled as to occupy it, were it the only false position which they have taken, or are likely to take, in the contest. We might, indeed, with great propriety, permit the whole matter to rest with the parties more immediately engaged (the courts and appellants), were it not for certain other errors begotten by, or intimately associated with, this as original, which should interest all reflective minds, and command attentive consideration. Such errors, for example, as find illustration in the demand made by these same persons, in the name of science, that not only all of the insane be exempt from criminal responsibility, but that a lot of fanciful, so-called "manias" and "insanities," characterized, each, and only, by some notable proclivity of the subject to do evil, be recognized as mental disease—regardless of the fact that such recognition would increase, beyond computation, the already burdensome number of the class for which exemption is demanded. An error that should be promptly recognized by all professions, but which the medical profession, looked to by society for instruction, and by psychology, now struggling to become a science, for protection, can not dutifully pass by without recognition and rebuke; and an endeavor

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to redeem itself, so far as knowledge and reason will enable it to do, from the imputation of having contributed to the demoralization of society, by suggesting and advocating theories of insanity and responsibility so inconsistent and bewildering as to justify unconcealed suspicion of the pretensions of its professors as psychologists, if not of their integrity as experts.

Toward these ends—the vindication of the medical profession, as both honest and learned, and animated by a desire to aid in the effort being made to develop psychology into a symmetrical science, which shall embrace and harmonize all of the facts and phenomena of psychical activity, and explain them as "consequences of ultimate principles"—the following dissertation, however accepted by those whose opinions, honestly entertained, may be the sequences of generous feeling rather than of the more complex antecedents of judgment or reason, is an humble contribution.

In our consideration of the subject, The Criminal Responsibility of the Insane, as of many other subjects of no less importance, we are too apt to begin wherever we may have happened to drop into position, without such preliminary acquisition of knowledge and investigation of subjects germane, as are essential to the formation of correct estimates of whatever may be immediately before us. We forget, indeed, in our haste to arrive at ends, that every considerable circumstance is "an inevitable sequence of antecedent conditions"—and that all of the facts and phenomena of the universe are continuous, one with another, however grouped and specialized by our perceptions. It is also true, that many, if not most, of those who have recently discussed this subject, seem to have dropped down upon it, rather than to have grown up through it.

It may not be unprofitable, therefore, to contemplate, for a moment, a few elementary propositions; which need only to be stated to be recognized as indspensable to a scientific understanding of our subject. It would seem, indeed, to be essential, that we know something about responsibility itself—responsibility as a general term—before attempting to discuss, intelligently, any of its specialized phases or relations. Our first question may well be, then:—

What is Responsibility?

Shall it be answered scholastically:—Responsibility is an inherent quality or condition, enabling, hence imposing an obligation upon, every human being to do right? Such an answer, not unworthy of metaphysical philosophy, as a general proposition, embracing the entire relation of mankind to the universe, may be correct; but as applicable to a more limited relation—the relation of individuals, or classes, to special phases of conduct—it is not true. It implies too much. It implies, indeed, on the part of every human being, an innate knowledge of what is right, in generals and particulars; or that every man's perceptions of right, however influenced by capacity and environments, and differing from the perception of other men, are to him, right, and the measure of his responsibility—thus constituting every man "a law unto himself." We must, therefore, reject this answer to the question propounded—and may do so without further discussion, or denial of its general merits; as we shall soon see that the specialized phase of responsibility which we have under consideration does not involve a question of knowledge, intuitional or innate; nor of conscience, however instructed. We shall see, indeed, that it is not an ideal ethic, pertaining to the broad and eternal relation of man to his Maker—of the finite to the infi-

nite—but that it is a social, political, utilitarian, ethic pertaining to the limited and temporary relation of man to man—of man as an individual, elementary being, to man as an aggregate, compound being, which we call society.

A better answer then, is this: Responsibility is an imputed mental quality, or condition, presumptively answerable to an obligation, imposed, by the despotism of necessity, upon every member of society, to obey the laws of society, without regard to individual knowledge or opinion of such laws; or the relation of such laws to abstract ideas of Truth, Beauty, or Good—however eternal or sublime. Responsibility is, in fact, a counterpart of law—conceived in the same matrix—born at the same instant, to grow with the same growth, and be modified, only, by the same modifying influences.

When? Where? From what necessity? Let us not be content with riddles. Consider the phenomenon.

Were there but one human being existent—no matter what the relation of such being to "eternal ideas"—or his knowledge, innate or intuitional, of right and wrong, as affecting conduct; no necessity for law or responsibility would proceed from his condition, and attach to his conduct, criminal or other.

But let there be two, or twenty, human beings associated for co-operative purposes, voluntarily, or involuntarily—so that the conduct of each can not be otherwise than definitely related to the interest of all—and necessity—a necessity before undreamed of—will be evolved from the conditions which characterize this primary evolution of society—this transition from the elementary to the composite condition of the race—a necessity for government, for subordination of individual will to a general purpose. From which necessity, law and responsibility will proceed as inevitable sequences.

The phenomenon is not, however, thus perfected. The sequence is not complete until a third person, penalty, proceeds from, and becomes incorporate with, law and responsibility:—thus constituting an important trinity in the affairs of society—to remain, forever after, strong as one, but impotent as many.

Law without responsibility would be inane.

Responsibility without law is incongruous. Law and responsibility without penalty would be purposeless, commanding neither respect nor fear.

Such being the genesis and relationship of responsibility, it is not a subject that admits of abstract consideration.

It is not an idea.

It is not a sentiment.

It is not a device.

It is not an accident.

It is not a revelation.

It is simply, as before suggested, "an inevitable sequence of antecedent conditions"—a natural procedure from, and expression of, necessity resulting from activities absolute and immanent in social organization.

But in thus defining responsibility, and tracing it to its origin in social necessity, do we not dethrone justice, the eternal and divine? and substitute use, the ephemeral and human? Well? Must we not go further, and admit, also, that the useful is the beautiful, and the necessary is the good?

We can not afford to discuss these old old questions now, before formulating from the foregoing suggestions the more pertinent question—

Is it a necessity of society that the insane as a class be held responsible for criminal acts?

Society itself, as represented by the law-courts, affirms the proposition. Are we, as representing science, prepared to controvert it?

Assuming, without argument, that the co-operative relation of man to man—all that which we call civilization—is a natural procession, essential to the happiness, and the higher attainment, of the race—how are we to determine, after all, what is, or what is not, a necessity of society? By studying the history of society, and generalizing principles from the facts and phenomena of its existence and activities. There is no other way. Having done this, in the light of modern science, we shall, unquestionably, come to regard society as a unitary being, however complex in structure—as an organized body, subject to all of the ordinary incidents of evolution and dissolution which pertain to, and effect, growth and decay—as a greater living being in which are incorporated a multitude of lesser living beings—the special activities of which, when merged, constitute a general activity, which effect movements that characterize their being as a whole.

And as life and growth—life for the sake of growth—are the intrinsically valuable characteristics of all organized beings, however simple or complex; it follows, that whatever is essential to the life and growth of society, is a necessity of society. Nothing else is.

Our question then may be modified, and again presented, thus:

Is it essential to the life and growth of society that the insane be held responsible, as a class, for criminal acts?

This question requires a somewhat more careful consideration of the structure, and activities of society, both general and special, and the present attitude of society in the grand procession of organized beings to which it belongs, and which it leads as well. But a glimpse only must suffice for present purposes.

As a general structure, society is homogeneous—that is to say, society, structurally is one, as mankind is one. Specially considered, the elements of society—the individuals, groups, classes of persons, which enter into and constitute its general structure are quite diverse—as in every social organization, as of a church, or state, various grades and characteristics of human development find representation.

The structural elements of society of whatever character, may be classified under two general heads, viz.: the stronger and the weaker.

These general classes are divisible into numerous sub-classes, or groups of individuals, variously affiliated by gradations of strength or weakness, and the characteristics which pertain to such gradations.

The activities of society are both general and special. Special as pertaining to classes, groups, or individuals—general as pertaining to aggregations, states, nationalities, the race. The movements of society correspond to its activities. Hence the movements of society are both general and special. The general movements of society are effected by, and represent a balance of special activities moving in a given and common direction. Like all other general movements in nature, with which the general movements of society are harmonious, they are progressive, and developmental. In other words, society grows.

The special movements of society are effected by, and represent the activities of special elements—activities by which social organization is effected, perpetuated or destroyed. Like the movements of all elementary bodies entering into organization, the special, or elementary, movements of society are either trophic or atrophic: tending toward, and effecting, evolution, or dissolution, as the case may be. Hence the special

movements of society are in opposite directions—antagonistic, in appearance, if not in fact—and ultimate contrariously.

It is therefore evident that were the special movements of society—the movements of individuals, groups, classes of social elements, the activities of which effect growth, at all times balanced by the movements of opposing elements; the movements of individuals, groups, classes of social elements, the activities of which effect dissolution, there could be no progress—no general movement of society—and society would be and remain without object or animation. It is essential then to the life and growth of society, without which society would be valueless, that such an equilibrium of special movements should not obtain. To prevent which, it is evident, there must be a balance of force and activity associated with the social elements which move in the direction of evolution, in excess of the force and activity, associated with social elements, the movements of which are in an opposite direction. It is, also, evident, that the prosperity, happiness, general attainment, of society at any given time, will correspond to, and fairly represent, such excess of force and activity; and the general relation of the stronger, higher, fitter elements of society to the weaker, lower, and variously unfit.

Now it so happens that the insane as a class constitute a group of the weaker elements of society, the motions of which are retrogressive—tending toward atrophy, and disintegration; antagonistic to growth. A fact of great significance in this discussion.

The apparent tendency of all force and activity being toward equilibrium, or rest—however impracticable, as a matter of fact—the all-important social question with us must be, how to promote and maintain in wholesome

activity an excess of force moving in the direction of evolution, and ultimating steadily in social growth, or improvement.

Heretofore in the history of society, as now, upon the lower planes of social development—not far in rear of our advance—the supremacy of the stronger, or fitter, social elements was maintained, and the consequent growth of society effected, by, (*a*) an abandonment of the weaker, or less fit elements to the numberless natural vortexes created by opposing currents, by which they were swallowed up; or (*b*) turning upon them, in an extremity of need, with violence—judicial or other—and thus anticipating their predestinated subordination.

What other method is now, or was ever, practicable? There is but one:—and that is for the stronger to shoulder, bodily, the weaker, and bear them, as a burden, in the direction which themselves are moving. Can this be done successfully? To what extent can nature's methods be disregarded, or reversed? Important questions. Upon this pivot the whole matter turns.

This is what professional reformers and philanthropists, without comprehending, perhaps, the full purport of their demand, are clamoring to have done. This is what society has been preparing, and endeavoring, to do, in Christian lands, for many later years. This is theoretical Christianity itself. In view of which facts our main question, again modified, may be restated, thus:

Are the stronger elements of society capable of carrying the weaker elements, bodily, as a burden, without so antagonizing natural laws as to defeat the object of the undertaking?

That society has not always, or ever before, been capable of such performance, does not prove that it is

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not so now. The conditions of society are not always the same. Growth itself modifies the conditions of further growth. "Milk for babes—meat for strong men." Benignant village magistrates for peaceful neighborhoods—implacable *vigilantes* for turbulent and inchoate States.

See what has already been done by the stronger toward carrying the weaker. Asylums for the idiotic. Schools for the feeble-minded, deaf, dumb, and blind. Alms-houses for the destitute. Infirmaries for the sick, Reformatories for the wayward and depraved. Homes for the friendless, and aged. State prisons for the condemned, and State palaces for the insane. Capital punishment is obsolescent. Prison life is being made attractive to the unambitious. Retaliation and revenge no longer find expression in our treatment of evil-doers. Animals, still lower than our criminal classes, find protection from punishment in humane societies. Can not more be done? Can not we, not only carry with us all obstructive elements, as we go, but convert them, at the same time, into elements of strength, by so doing? Science says, no! Physical exertion may be rewarded by increase of physical strength, up to a certain limitation. Beyond that line exhaustion is an inevitable sequence of effort. A feather breaks the loaded camel's back. Nature is inexorable. All activities are self-limited. The earth can not transcend its bounds. The universe is not superior to the force which pervades and moves it. Nature affords an ample margin for contingencies—but does not tolerate innovations or changes of methods. The orbital may be so modified as to become eliptical, but lineal, never! Ignorance boasts of having conquered nature—but nature laughs at such pretensions. By co-operating with nature, we may, by our knowledge, protract, for a day, a single life; or

increase the longevity of a generation. But we can not perpetuate the existence of a single individual. Society may experiment; but nature vindicates her own methods, and asserts supremacy at every turn. Society may attempt the removal of all obstruction to its advancement, by placing the weaker, or retrogressive elements, upon the shoulders of the stronger—but the weaker elements, when thus removed from impending danger, and the natural exhaustion of their own activities, at nature's own suggestion, will multiply and accumulate upon the shoulders of the stronger, until nature's methods are re-established, at whatever expense of human sentiment. The development of insanity as a "disease of civilization,"—and its apparent increase in modern times—attributable, who knows to what extent, to the proliferation of unstable elements thus rescued from nature's nemesis—and the alarming increase of "incurables" in our midst, the movements of whom toward dissolution have been thus arrested by society—furnish examples worthy of serious consideration. The hope, or faith, which may inspire the credulous, and lead them to believe that weakness can be converted into strength, without limit, by arresting or reversing the order of nature, by whatever method, is more creditable to the hearts than to the heads of those who entertain it. Nature accomplishes wonders, it is true, by conservations and transmutations of force—but such a metamorphosis of elements—suspension or deviation of natural activities, are not among the anticipations of science, as either practicable or desirable; and the days of miracles, were there ever such, do not repeat themselves.

But admitting that society is not now, and in the nature of things never can be, equal to the task of carrying, free from the restraint of responsibility, all of

the physically and mentally infirm—the intellectually defective, poor, maimed, halt and blind—the "cranks" and "crooks" as well as the maniacal and demented, and still make progress in the grand march of civilization—it may be urged, notwithstanding, that the insane as a class are entitled to such consideration. To which we may respond—there is no good reason for exempting from responsibility a man whose mental activities may have become disordered, or impaired, by disease consequent, perhaps, to his own wrong doing, which is not equally forcible and applicable to another of similarly imperfect mind, whose infirmities may have been congenital or the result of enforced conditions. No good reason for making an invidious distinction in favor of a class of persons who have reached by retrogression, a common plane occupied by others who have failed to rise above it because of original weakness or deformity.

Yet there are of us those who will not be convinced by such facts and arguments, nor satisfied by the obvious conclusion. Specialized science may be too intent within its own limitations to contemplate so broad a field. Specialized philanthropy may be too myopic to recognize distant, though related, objects. Having in view but a single subject, we may fail to see and comprehend the significance of the fact, that the movements of all of the defective elements of society, which are retrogressive, are necessarily antagonistic, and obstructive of life and growth; and that the idiotic, imbecile, epileptic, insane, and otherwise defective and depraved elements of society—especially such as are constitutionally predisposed to ignorance, intemperance, poverty, insubordination, vice and crime—"the savages of civilization"—all belong to the same grand division of social elements, and constitute groups of the variously unfit; between whom and the more fit there

ever has been, and ever will be, until the natural is abrogated by the miraculous, an "irrepressible conflict" in the great struggle of life.

Talk as we may of bearing others' burdens—the renunciation of self, and loving one's neighbor, as the highest possible, personal, present attainment, characteristic of Christian civilization; of crowning with thorns and crucifying the natural man within us, that prodigals, thieves and murderers, may be redeemed and rejoice with us in a common heritage, as leading to the greatest possible attainment in an unknown future—the facts still remain that such accomplishments and such results are practically unattainable by human beings subject to natural laws. That we can at best but approximate such ends: and then, only by modifications of an increasing self, effected by natural growth and adaptations; instead of a diminution of the natural man, accomplished by whatever restrictions and renunciations.

Having thus disposed of our subject in a general way by reference to elementary principles, and a statement of facts patent to all observers, it may still be claimed that the insane should be exempt from criminal responsibility for many special reasons.

For example: Because of our ignorance of the factors which enter into the more abstruse problems of insanity.

Because of our want of knowledge of the more intimate and intricate relation of mind to matter—of knowledge and purpose to cerebral or general physical conditions.

Because of our inability to estimate the influence of morbid elements, or activities, in the formation of mental concepts, with sufficient accuracy to constitute the basis of judgment involving the life or death of an individual:

wherefore, if insanity is under any circumstances a sufficient excuse for crime, it should be under all circumstances "an unconditional excuse."

This is unquestionably the strongest special plea for the exemption of the insane, as a class, from criminal responsibility that can be made.

Yet in view of the facts that there are morbid elements incorporated in every man's being, and morbid activities affecting to some degree every man's motions, and society can not afford the exemption from responsibility of all men, it is weak. And in view of the fact, if it be a fact, that responsibility proceeds from, and pertains to, the necessities of society instead of the mental states of individuals, it is worthless.

Another special plea, more specious, if less reasonable, than the foregoing, is based upon a fanciful constitution of what is called "the human mind;" which represents mind as divisible into natural kingdoms, and provinces—a great intellectual and a great moral kingdom—each composed of special provinces, or powers, so distinct and sovereign that in either kingdom or province local disorder, insubordination and riot indeed, may prevail, without implicating other provinces or powers, or disturbing the general mental peace. So that, as is claimed, one may present a condition of moral idiocy, moral imbecility, or moral insanity, associated with well developed, unimpaired, and undisturbed, intelligence. So that one many suffer no end of special insanities, or monomanias; manifested by an apparently ungovernable propensity of the individual to lie, steal, burn, get drunk, ravish or kill, as the case may be; without evidence of intellectual defect or disorder. So that an individual may be subjected to no end of internecine psychic conflicts, in which any one mental power may overcome, or be overcome by, another; and the

creature, thus unfortunate, be compelled to act, sometimes in opposition to his own reason—sometimes contrary to his own judgment—sometimes in defiance of his own will.

How incomprehensible the human mind? (Such a mind.)

How "fearfully and wonderfully made" is man. (Such a man.)

This plea, were it based upon facts, as it is not, would nevertheless fail to justify exemption from responsibility of whole classes of persons whose unrestrained activities would be intolerable to society; whose restraint, otherwise than as persons held responsible for their acts, would, in many instances, defeat its own purpose—as every superintendent of an insane hospital or asylum has had reason to know, or to believe.

Still another special plea for exemption of the insane from criminal responsibility finds excuse in certain strictly physiological and pathological views of mental activity; and manifestation, based upon the supposition that mind is but an elimination of natural force effected by the disintegration of material structures; differentiated by transmutation accomplished by the brain; and the correlative suppositions that the brain is, exclusively, the organ of mind; and that there are certain localizable centers or areas of brain-structure, the specialized activities of which characterize mental manifestations in both health and disease. Certain domiciliary cells, as it were, in which reside, and from which issue, in response to excitation, singly or by companies, moral or immoral feelings, emotions, thought and purposes, to ultimate in actions, orderly or disorderly, as the case may be; determined solely by local circumstances, of size, quality and condition, inherited or acquired, of such brain centers or areas. From

which the inference is drawn, that mental disorder, of whatever kind, is the result of cerebral disease of some kind, and the conclusion reached, that insanity should be regarded as an "unconditional excuse for crime."

This plea, however related to science, or suggestive of the direction in which truth may yet be discovered, is in its relation to this utilitarian ethic of responsibility, as pertaining to the insane, either without significance, or it suggests too much. Because, if the predicate be true, it must be true, also that like mental manifestations are the result of like cerebral conditions: and the mental phenomena associated with the criminal acts of insane persons do not differ so far, and so uniformly, from the mental manifestations associated with the criminal conduct of persons not insane, as to enable the most critical to decide, in all cases, which should, and which should not, be ascribed to cerebral disease.

This is the dilemma, in fact, into which all special pleas for the exemption from criminal responsibility of the insane, as a class, lead us. A dilemma from which there is no escape, otherwise than by a denial of the predicate, and an abandonment of the affirmation; or an admission to the catalogue of mental diseases of a multitude of psycho-pathological shams; the so-called "reasoning," religious," original" and other "monomanias" of modern invention, the existence of which requires, only, for verification, a certain amount of biographic information, by which some more or less definite criminal propensity may be shown to have characterized the individual described, for a longer or shorter period, and an ascription of such propensity to hypothetical morbid conditions of brain, inherited or acquired, as readily diagnosticated by a "neurologist" without observation of the patient as with.

This plea, is also faulty, for the reason that it has not been, and probably never will be, demonstrated that mental characteristics are correct indices, at all times, and under all circumstances, of cerebral conditions; nor that cerebral conditions alone characterize mental peculiarities.

It is more than probable, indeed, that while it is true that the brains of all vertebrate animals, including man, are highly specialized organs, chiefly concerned with mental functions—and that the corticular portion of the cerebrum is the most highly specialized structure of brain substance, chiefly concerned in the more complex manifestations of mind, characteristic of the biological evolution to which such specialization of structure pertains—without which no psychical evolution reaching the complexity and dignity of thought ever did or could take place—it is equally true that all psychical activity is not limited to the cerebrum, nor to the brain—and that mental concepts, as well as feelings and emotions, may be influenced by conditions of nerve-structure in which the simpler, and precedent, or elementary, psychical activities—activities which by integration and evolution ultimate in the highest and most complex mental phenomena—take place.

Comparative psychology studied in connection with comparative anatomy—the evolution of mind *pari passu* with the evolution of a nervous system, beginning with the lowest animal, and culminating with the highest man—should satisfy us of this. The nervous system of a man alone, structurally and functionally considered, should suggest it, without such study. The cortex of the cerebrum is not an isolated structure. The cerebrum itself is not an original and independent mechanism. The encephalon as a whole, is not a self-derived, self-acting, and self-sufficient body; not

even for the purposes of thought. They are each and all but a specialization of a general structure by which all of the organs of the body are bound together for a general purpose,—by which a man, from the crown of his head to the soles of his feet is unified, and made, every inch a man! Increasingly complex specializations of nerve-structure, one with the common mass—as thought is a specialization of psychical activity, one with that which we call instinct in lower animals, however grandly above it, or contractility, as the response of matter to excitation, in the lowest. Specializations of old structures, effected by evolution, adaptation and use, and not an addition of new, and independent organs.

Consider for a moment the relation of these specialized parts to the rest of the nervous system, (including both intra- and prevertebral distributions) and the relations thus effected to the outer and surrounding world. Consider, also, the relation of this outer and surrounding world to the phenomena of mind! The eyes, the ears, the finger-ends—the structures which receive—the structures which convey—and the structures which integrate the impalpable materials that emanate from every object of the outer and surrounding world,—out of which the mental *ego*,—the conscious self—memory, feeling, and imagination, are constructed—surely they can not be without significance in the formation of mental concepts, however anatomically removed from the cerebrum, or any part thereof! Think of the visceral senses, the influence of local organic appetites—how suggestive they may be of imaginations—how potential in the formation of purposes! The great cervical, thoracic, and abdominal, ganglia—with their prevertebral plexuses—are not their conditions as con-

stantly and as faithfully reflected in mental states, especially of feeling or emotion, as are the conditions of the cerebrum, or any part thereof?

Do not the sexual organs of all animals, especially of man, while actively virile, exercise an incalculable influence over psychical activities—intensifying feelings—modifying opinions, and instigating actions, ranging all the way from petty puerilities to grand historic episodes? Is there not, notoriously, "a woman in the case" in a large proportion of criminal offenses, as well as of heroic actions, daily occurring in our midst?

How was it in olden times? Would Priam's son have robbed Menelaus of his Spartan bride, and thus provoked the Greeks to war, had he been born a eunuch or suffered emasculation in his youth?

Would Agamemnon have fallen by assassin's hands in his own house, had not his wife, moved by organic impulses, not strictly cerebral, yielded to Ægisthus, while the "King of Men" was absent, avenging his brother's wrongs on Troy?

O, no! Physiology has a broader basis on which to build the temple of psychology, than the cerebral hemispheres alone. The temple of psychology—in which, when complete, the figure of a full grown man shall stand, perfect in all his parts, and to all who ask—"Whence thought?" answer as an Oracle—"I think!"

If then it be true, as affirmed, that society is but an organized being subject to the same incidents of evolution and dissolution which characterize the activities of all living beings—If life and growth, life for the sake of growth, are the only valuable characteristics of organization, hence of society—If evolution or growth is only effected by a predominance of force and activity associated with progressive or constructive elements, over the force and activity associated with retrogressive

or destructive elements—If the organic tendency of the one class of elements is antagonized by the tendency of the other—If in social organization elemental antagonisms are only overcomable by (*a*) an abandonment of the "unfit" to the vicissitudes incident to their own movements—(*b*) anticipating by violence their natural disappearance—or, (*c*) miracle of strength and generosity! placing them upon the shoulders of the stronger or "fitter," to be borne as a burden in opposition to their own activities. If it be true, also, that the insane as a class, in their relation to other social elements, are retrogressive, weak and "unfit" elements, and that when carried by the stronger, and so protected from the violence of their own retrogressive activities, they will multiply, and accumulate as a burden out of proportion to the strength developed by the effort to carry them—and if shouldered and borne, as a class, by the stronger, other elements of weakness, correlatable, if not identical, will get themselves labeled "INSANE," and clamor to be carried, also—Is it not clear to every well informed man that society can not afford to handicap its stronger elements by placing upon them the entire burden of the weaker? and that an arbitrary discrimination in favor of a single class of the "unfit" (however easily that one class, if not unduly increased by imposture or nature's resentment might be borne), would be invidious and unreasonable?

You would hang a poor lunatic then? If need be, yes. If needless, no. For myself, I doubt the necessity, or utility, of judicially taking the life of any human being, for the protection of society at the present time, however beneficial it may heretofore have been to do so. The death-penalty is, to my perception, a survival of

savagery, more becoming our barbarian blood than our Christian skin, however thin that may be. As we become more and more "regenerate" by still greater growth and consequent departure from ancestral states, society will abandon even this "relic of barbarism," becoming daily more and more offensive to cultivated sense.

It is, however, weakness to assume that it is more needful for the suppression of crime, or the protection of society, to execute one class of criminals than another, the crimes of which are the same, or of equal atrocity. Neither is it more unmerciful. An insane man's life is not more sacred, nor more valuable to himself or others, than is the life of any other man of equal capabilities and expectations; and until society shall have outgrown the necessity of suppressing any class of criminals by death, such of the insane as commit crimes incurring such penalty, with knowledge and purpose, can not be reasonably excepted from its operation.

Thus, approach as we may, the conclusion is reached at length, that it is not practicable, even if desirable, to exempt the insane, or all who are liable to be catalogued "insane," as a class, from criminal responsibility—and that now, as ever, Law, Responsibility and Penalty, the grand trine evolved from the primiparous womb of Social Necessity, as reflected in the rulings of English law-courts, British and American, holding every man responsible upon the basis of his own conditions, both general and special, represent the vital necessities of society, as indicated by present conditions.

ABSTRACTS FROM HOME AND FOREIGN JOURNALS.

CRIMINAL RESPONSIBILITY OF THE INSANE.—We abstract the following from an editorial in the *British Medical Journal* for October 27, 1883. James Cole was arrested for the murder of his child, tried and sentenced to be hanged, and upon his case the following remarks are based. Fortunately the Home Secretary ordered an examination by Drs. Orange and Glover, which demonstrated that the prisoner was unquestionably insane, and resulted in a reprieve:

"The echoes of the Gouldstone case have scarcely died away, when the necessity arises for another loud protest against the manner in which trials for murder, in which the defence of insanity is set up, are conducted in this country. As if to show the arrogant disregard of the law for humanity and common sense, another lunatic has been condemned to death, and it is again left to the press and public opinion to rectify a conspicuous flaw in the work of our judicial machinery. Mr. Justice Stephen in commenting on the relations of insanity to crime, has reprehended with much dignity the use of violent and stinging language in controversies on this subject, and has advocated the adoption of a conciliatory spirit by the representatives of science and jurisprudence alike. There can be no doubt that the rebuke which he administers is well merited, or that the advice which he gives is excellent; but even he himself would perhaps admit that there is some excuse for impatience on the part of medical men when they find that, notwithstanding all the discussions that have taken place, stolid indifference to scientific truth still reigns supreme in courts of law; and that the miserable victims of disease are still sometimes given over to the hangman. In the case of James Cole, who was condemned to death at the Central Criminal Court on the 18th instant, there seems to have been no attempt to disguise the fact that he was a lunatic. Mr. Justice Denman, in whose brain there ought to be some atavistic vestiges of medical habits of thought, derived from his grandfather, who was an eminent physician, in passing sentence on the prisoner, said, "It was established in evidence that you had been labouring under delusions." So it is clear that this man is to be hanged as a recognized lunatic, and on the preposterous supposition that the mad crime which he committed was in no way connected

with his delusions, but was the expression of an altogether independent outburst of passion which agitated his mind.

The newspaper-reports of the evidence adduced at the trial of James Cole are very vague and fragmentary, but still they contain enough, even without the admission of the judge that the existence of delusions had been established, to bear in upon any medical mind the conclusion that the man is a dangerous lunatic. Out of work, and in abject poverty, he murdered his child, about three and a half years old, on August 19th last, by lifting it by the legs, and knocking its head upon the wall; and for no better reason, that the prosecution could suggest, than that he was out of temper with his wife. The very ferocity of the act limits the inquiry into its character. A father who makes a bludgeon of his own child, and, plucking it from its cradle, does his best to dash its brains out, must be blind with fury, drunk, or mad. In the case of Cole, the theory of drunkenness may be excluded; for, although given to intemperance, as freely as any impecunious man can be, he had had no drink on the day of the murder, and was sober when arrested immediately afterwards. The question, therefore, is, was he frenzied by passion or maddened by disease?

The circumstances of the crime discountenance the idea that Cole was moved in what he did by an outburst of brutal anger which he might have suppressed, and was bound to suppress at its beginning, however powerless he might be to arrest its progress when it had gathered its full force. He had been quarrelling with his wife for some hours before he attacked his child, and there was no new provocation, no retort, or gibe, or blow to goad him to fury when he did so, for his wife, with the view apparently of stopping the altercation, had left the house for some time, when he committed the murder. He had, in fact, had time to cool down; and the fact that the atrocity was perpetrated, not at the very acme of frantic feeling, but after a period of subsidence, is against the theory that it was prompted by passion. But much more forcible objections to this theory remain to be urged; for positive evidence is forthcoming that Cole was delirious or insane when he killed his child; and, of course, the existence of either of these conditions would be incompatible with the existence of controllable, if uncontrolled, anger. The prisoner's son testified that, on the night of the murder, he complained that his wife had hidden people under the floor and in the cupboard to try to poison him; and a curious illustration of the active influence of these delusions on his mind came out incidentally, when it was proved that his immediate grievance against his

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wife was that she had kept him all day without food, while at that moment there was actually food on the table—food, however, which he declined to touch, clearly because of his conviction that it had been tampered with. And such delusions were not merely transient visitants of his mind, for he told Dr. Jackson subsequently that he thought he was being poisoned, and that his wife had set men on him—terrors which haunted him in his dreams as well as in his waking hours, causing him to start up at night, shrieking out that he was being murdered. Dr. Jackson felt certain that he was a dangerous lunatic, who ought not to have been left at liberty; and few medical men knowing anything of insanity will differ from the conclusion at which he arrived. The case was, in fact, a typical one of mania, with delusions of persecution originating, in all probability, in alcoholic excesses, operating on a nervous system predisposed to disease, and weakened by starvation.

The surgeon and chief warder of the Clerkenwell House of Detention were examined for the purpose of showing that the prisoner had displayed no symptoms of insanity, but had conducted himself in accordance with the prison-regulations; but their evidence broke down, for it was elicited from them that on one occasion he had become so violent that he had to be removed to a padded cell—a very unusual occurrence in the case of a prisoner awaiting trial. But, had their testimony remained unshaken, it would still, being purely negative, have had little or no value, unless supplemented by a full and minute account of the nature of the examination carried out, and of the tests used to determine the prisoner's state of mind. Quiet conformity to the prison rules is accepted, in most houses of detention, as conclusive proof of sanity; and an inquiry into cerebral function, when it does take place, is not seldom of the most superficial and perfunctory description. If a man can tell his own name and the day of the week, and put out his tongue to order, he may be pronounced of sound mind, although all the time saturated with madness to the tips of his fingers and the roots of his hair.

In sentencing Cole, the judge referred to the fact that only one witness had been called in support of the view that the prisoner was irresponsible for his actions; but in connection with that fact, it ought surely to have been noted that he is miserably poor. Had he been possessed of ample means, there would have been no lack of medical testimony for the defence; and it is just one of the most damaging criticisms that can be passed on our present method of conducting trials like that of Cole, that it leaves the poor man at a

manifest disadvantage. The prosecution was well aware that the defence of insanity was to be raised on the prisoner's behalf in this case, for Mr. Polland alluded to it in his opening statement; but he took no steps to ascertain, through an inquiry by skilled persons, what grounds there were for that defence, but was content, in this most difficult and abstruse question, to trust to the negations of a prison surgeon and warder.

It being admitted that Cole laboured under delusions which were engendered, not by the direct toxic effects of alcohol, actually circulating in the blood, but by disorder of the brain, in the production of which alcohol had, perhaps, played the principal part, the question for the jury really was, whether these delusions dictated the murderous assault on his child, or whether that assault was the result of a paroxysm of temper brought on by extraneous circumstances, and in no way related to the delusive beliefs? Given a man labouring under delusions, and an action so outrageous as that of swinging an unoffending child by the legs, and crashing its head upon the wall and floor, and we should have thought that the conclusion was inevitable that there was a connection between the mad thought and the mad deed. But legal subtlety reasons not as common men do; and so, if the man knew the nature and quality of his act, and knew that he was doing wrong, the lawyers will not allow that his delusions had anything to do with his criminal act. He is a responsible being, and must, therefore, have been swayed by the motives which influence responsible men. His delusions are pushed aside, and regarded as merely natural *curios* which he carried about with him, but which had no more to do with his conduct than the watch in his pocket or the mole on his back. "I cannot entertain a doubt," said Mr. Justice Denman to Cole, "that, on the occasion on which you violently caused the death of your child, you knew you were doing wrong, and knew that you acted contrary to the law of this country, and that you did it under the influence of passion, which had got possession of your mind from want of sufficient control, the result being that the poor child came by a sudden and savage death." Very neat this! and apparently borne out by the evidence, for Cole said to the first man he met when running away, "I have murdered my child," evincing thus a knowledge of the quality and illegality of his act, but very superficial also, when closely scrutinised. Mr. Justice Denman's statement seems to embody the very view which is characterised by Mr. Justice Stephen as "a narrow view of the subject, not supported by the language of the judges." It is founded on the erroneous notion that a

man whose mind is possessed by active delusions on subjects of vital importance, is yet capable of trains of rational thought and feeling, in which his delusions have no lot or share, and on a confusion between the formal knowledge of the illegality of an act, and an essential knowledge of its moral character. "Suppose," says Mr. Justice Stephen, with his accustomed perspicacity, "that, by reason of disease of the brain, a man's mind is filled with delusions which, if true, would not justify or excuse his proposed act, but which in themselves are so wild and astonishing as to make it impossible for him to reason about them calmly, or to reason calmly on matters connected with them. Suppose, too, that the succession of insane thoughts of one kind and another is so rapid as to confuse him, and finally, suppose that his will is weakened by his disease, that he is unequal to the effort of calm sustained thought upon any subject, and especially upon subjects connected with his delusion, can he be said to know, or have a capacity of knowing, that the act which he proposes to do is wrong? I should say he could not."

There seems every reason to believe that the mind of Cole, when he killed his child, was, by reason of disease of the brain, filled with delusions, very wild and astonishing, about which he could not reason calmly, and which welled up so rapidly as to bewilder him, while his volition was at the same time so much weakened, that he could not exercise any control over the current of his thoughts; and, according to Mr. Justice Stephen, it would therefore be reasonable to infer that he did not truly know he was doing wrong when he committed the horrible violence for which he was tried. A strong case is, at any rate, made out for further inquiry, and it is to be anticipated that the Home Secretary will lose no time in empowering competent physicians to examine him, and report on his mental condition."

THE CASE OF COLE, AND THE LEGAL PROCEDURE IN ASCERTAINING THE MENTAL CONDITION OF PRISONERS.—From the *Journal of Mental Science* for January, 1884, the following comments, based upon the case of Cole are copied. The article is from the pen of Dr. D. H. Tuke: "It would be difficult indeed to conceive any circumstances more calculated to bring English Criminal Law into contempt than the results of the trials of Gouldstone and Cole for wilful murder. Our only consolation is that such pitiful exhibitions of the working of our present judicial machinery, in cases in which the plea of insanity is set up,

may lead to some practical reform therein. Had any commentary been desired on the necessity of carrying out the Resolution* passed at the recent Annual Meeting of our Association, under the presidency of Dr. Orange, and again at the October meeting of the Metropolitan Branch of the British Medical Association, such commentary, written in letters of blood, has indeed been supplied by the occurrence of these two trials in rapid succession.

The great object of this Resolution is to secure a full and deliberate examination of the accused before instead of after his trial, by competent medical men. In the cases of Gouldstone and Cole, the result to them, it is true, would have been the same, but with how much greater propriety, dignity, and economy! We should have been spared the spectacle of judges solemnly condemning to death, and clearly indicating it to be their opinion that it was a just death, men who were lunatics. We might also, perhaps, have been spared the spectacle of the oracle in Printing House Square gloating over what is regarded as the courageous action of juries in supporting the law against the wild and dangerous theories of "mad doctors." Had the deliberate examination we urge been made in the case of Gouldstone, instead of one of some twenty minutes at the eleventh hour (the deed was committed at least five months before), the man's mental condition could have been carefully tested without haste; and in the case of Cole the same course would have exposed his insane condition for years previously, and all the facts bearing upon it would have been procured at leisure. Important in such a case, also, is the circumstance that his wife could not give evidence in court, while her intimate knowledge of his history would have been of the highest value to a medical commission. Again, the law requires a man in such instances to prove himself a lunatic; but is not this a mockery of justice? How can a poor prisoner afford to pay? Counsel may,

* "That prisoners suspected of being mentally deranged should be examined by competent medical men as soon after the commission of the crime with which they are charged as possible, and that the examination should be provided for by the Treasury, in a manner similar to that in which counsel for the prosecution is provided. It is suggested that the examiners should be the medical officer of the prison, the medical officer of the County Asylum or Hospital for the Insane in the neighbourhood, and a medical practitioner of standing in the town where the prison is situated; that the three medical men shall, *after consulting together*, draw up a *joint* report, to be given to the prosecuting counsel, the cost being borne by the public purse, inasmuch as it is useless to tell an insane man that the burden of proving himself insane lies upon himself." (See *Journal*, October, 1883, p. 451.)

indeed, be assigned to defend the prisoner too poor to pay, but this is at the last moment, and what possible chance has he of doing justice to his client? None; for it is then too late to make a skilled inquiry into and study of the facts of most value in the determination of the prisoner's insanity. The effect of this Resolution would be to prevent a repetition of circumstances that make the interference of the Home Secretary imperative; for, we repeat, it can not be other than prejudicial to the respect that we should always wish to see entertained for courts of law, to go on continually convicting and sentencing lunatics to the gallows, and then reprieving them—a game which may be all very well for cats and mice, but is scarcely worthy of being engaged in by those who uphold and those who break the law.

Nor are these trials less remarkable as commentaries upon the proper mode of understanding and interpreting the legal test of insanity to which, truth to say, we are almost weary of referring. As those who have read Mr. Justice Stephen's work on Criminal Law, reviewed in this Journal in July last, are well aware, he reads between the lines of the *dicta* of the Judges of 1843, and charms his psychological readers with the conclusion that the knowledge of right and wrong does not merely refer to the law of the land, but involves the question whether the accused was able to judge of the moral character of the act at the time he committed it, not merely in an abstract sense, but for himself, under the special circumstances of his own delusion or loss of control.

So liberal a construction of the test seemed to open the way to a sort of compromise between medical and legal opinions. Now, what from this point of view is so noteworthy, is that neither of the judges who presided over these trials (Mr. Justice Day and Mr. Justice Denman) appear to have had the faintest idea of such an interpretation of the terms. On the contrary, they obviously understood them in the baldest, most literal manner possible, but not otherwise, we are bound to say, than we supposed that they would understand them. Thus, Mr. Justice Denman, in addressing Cole, told him he could not doubt that he knew he was doing wrong. "You knew," he added by way of explanation, "that you acted contrary to the law of this country." Whatever loss of control there might be was due to "passion." His Lordship did not, with Sir James Stephen, say that any one would fall within the description of not knowing he was doing wrong "who was deprived by disease affecting the mind of the power of passing a rational judgment *on the moral character* of the act which he

meant to do." ("Criminal Law," Vol. ii., p. 163.) Nor did he tell the jury that the law when properly construed allows that "*a man who, by reason of mental disease, is prevented from controlling his own conduct, is not responsible for what he does*" (p. 167); nor yet that if a man's succession of insane thoughts is so rapid as to confuse him and render him unequal to the effort of calm sustained thought, "*he can not be said to know, or have a capacity of knowing, that the act which he proposes to do is wrong*" (*Op. cit.*). That such is, after all, the proper way of understanding the *dicta* of the judges was equally foreign to the mind of Mr. Justice Day. The judges succeeded also in conveying to the juries the impression that they must take the meaning of the terms in question in the sense in which they have been hitherto understood. All we have to say on this aspect of the matter is, that either official sanction must be given to the interpretation of Mr. Justice Stephen, or the words themselves must be so altered as to make their meaning plain to jurymen, and not only to them but to the judges themselves. The difficulty, however, presents itself that, not only do most judges lay down the law in the old-fashioned sense, but they do not conceal their sympathy with this interpretation, and they would regard it as a subterfuge were a medical witness to reply—"Yes," in the sense attached to the words by Sir James Stephen to the question—"Did the prisoner know that he was doing wrong?" In Gouldstone's case, for instance, Dr. Savage felt that to do so would be an evasion of the real meaning attached by the court to the expression, and unworthy of a scientific witness.

Another point to which one of these cases forcibly calls attention, is the neglect of the obvious symptoms of insanity in a man from whom homicidal acts might have at any time been expected. From what has transpired during and since his trial, we find that Cole was in good work up to 1877, and then attentive to his wife and children; that then he fell out of work, left home to seek it, and was found by the police, who took him to the Croydon workhouse infirmary as a wandering lunatic. When his wife went to see him he looked ill and strange, and did not know her; he thought she was dead, and that he was there for killing her. Unfortunately, instead of being placed under proper medical treatment in an asylum, he was allowed to go home in a week's time, and frightened his wife by his mad actions, nailing down the windows, &c., and placing a large knife under his pillow. The insane suspicions which marked his case then have never left him, and the wife had to earn a living by caning chairs, which he would

sometimes smash to pieces, the reason assigned being that she was electrifying him. At night he was sleepless, and would walk the room, hearing imaginary noises, and declaring that strange men were concealed in the house. A medical man saw him in 1879, and said he was dangerous, that everything must be kept out of his way, and that he couldn't understand why he had been allowed to go home from the workhouse instead of being sent to an asylum. So he went on, fancying when in the house that his wife was trying to poison him, and when out of it that people were watching him in the street, and even assaulting them on this ground. His wife expected that he would commit some violent act, and that she would probably be the victim, but she does not appear to have thought he would injure their child, of whom he was very fond. The poor woman applied to the magistrates, but they comforted her by telling her that they could do nothing till he had committed some act. They referred her, however, to the relieving officer, and in consequence the parish doctor examined Cole, and gave her a certificate on which he was removed to the infirmary. Here was a second opportunity for doing something, taking care of the lunatic, and averting a dreadful catastrophe. But in vain. He was sent out in two days as mad as ever, and his wife in mortal fear, called in the doctor, and he attended him at home. Soon after the man killed his child. All the day he had been walking about the house with a hammer and chisel, following his wife, who eventually managed to take them from him and conceal them. The wife at last went for a policeman, and when at the gate heard a noise in the house which induced her to return, when she found he had done the deed for which he was tried, and which we maintain might and ought to have been prevented by placing him in an asylum long before. This is the moral of the story. We have no desire to ignore the fact that Cole was an intemperate man. But we are satisfied that he was a sober man up to the time that he became insane in 1877, and that his giving way to drink was one of the symptoms of his madness, although doubtless a further aggravation of it. But while it may be impossible to gauge with precision his moral responsibility in relation to the intensity and continuance of his mental disorder, proof is not wanting that he had been sober for at least a week before the fatal act was committed. In a word, this was not the result of drink, but the outcome of a long, lasting state of delusional insanity. Had he joined the Blue Ribbon Army for months before, his delusions and their logical development in violence would have been the

same. Add to this, that in consequence of his inability to earn a livelihood through his mental infirmity, he was wretchedly poor, and his brain was consequently ill-nourished, and rendered more and more a prey to suspicion.

The conclusion, then, to which we earnestly draw attention, in the interests alike of the law, of life, and of the lunatic, is the necessity of reforming the mode of Legal Procedure in ascertaining the Mental Condition of Prisoners."

Spontaneous Rupture of the Heart in the Insane.—Dr. Arthur F. Mickle, in the *Edinburgh Medical Journal*, for February, 1884, calls attention to cases of spontaneous heart rupture in the insane, and gives the following illustrative cases:

Case I.—A. B., clothworker, aged 66. This patient was a short and rather lightly built man, with dark gray hair, a sallow complexion, and of billious temperament. Twenty-seven years ago he unfortunately became melancholic and had delusions, and since then has spent the greater part of his life in an asylum. He usually enjoyed fairly good health, and there is no history of any serious illness, nor had he any symptoms that would lead one to suppose he had any cardiac lesion. An examination of the chest a few months previous to his fatal illness, discovered a diffused apex beat and faint cardiac sounds; the first sound was also impure, and the second accentuated, especially in the pulmonary area.

On the 10th of January last—previous to which he had been in a fair state of bodily health, and occupied daily with light work—he complained of precordial pain, oppression of breathing, and a fainting sensation. On examining his chest the apex beat was found diffused, the impulse weak, and the cardiac sounds were very faint in all regions; the first sound was also impure, and the action was irregular. The pulse was weak, compressible, of small volume and irregular. As he felt faint and appeared to be seriously ill, he was ordered to remain in bed, where he had been sent as soon as he complained of feeling so unwell, and had light nourishing diet and an anodyne draught given him. After a while he rallied a little; the precordial pain abated somewhat, and the difficulty of breathing was not so great, and he took a sufficient quantity of liquid food during the day. There was no further change until half-past five next morning, when he became extremely faint, and was soon in a condition of collapse: the respiration was embarrassed and sighing, the cardiac sounds were very

faint and the action irregular, the pulse weak and fluttering, the face had a death-like pallor, he broke into a profuse and cold prespiration, the extremities soon became cold; and all these symptoms gradually becoming intensified, he died in the course of two hours.

Post-mortem.—On opening the pericardium a small quantity of clotted blood and some serous fluid were found. An examination of the heart revealed, near the centre of the left ventricle, a discoloured patch about two inches long and an inch broad, having the appearance of a contusion. On looking more closely it was found that the ventricular wall in this discoloured area was considerably damaged, being, in fact, torn and infiltrated with blood, and a verticle section of it showed bundles of muscular fibres and layers of blood-clot alternating with one another. Though there was no actual rent in the ventricular wall, yet it was so much injured that blood could readily extravasate. The injured ventricle contained some blood-clot, and its walls presented a mottled appearance; in some parts there were brownish colourd patches, and in others, where the degenerative process was more advanced, a yellowish tinge prevailed; its consistence also, was much diminished, for it was very soft and friable, and had a somewhat greasy feel. The coronary arteries were slightly thickened and showed signs of degenerative changes, and there were a few yellow, opaque, elevated patches on the inner surface of the commencement of the aorta. These were distinctly fatty changes, and the patches could easily be scraped off. Both aortic and mitral valves were slightly thickened. The right ventricle was also affected, but in a minor degree. The lungs were congested posteriorly, and the liver was fatty. The anatomical appearances of the brain and other viscera presented no features of special interest.

Case II.—M. N., aged 70. This was a moderately nourished but feeble old woman, with gray hair and blue eyes; she had a vacant facial expression, and was in a state of senile dementia. I could not obtain any definite history of this patient, but understood she had always enjoyed fairly good health, and had not suffered from any serious organic diseases. An examination of her chest some weeks prior to death revealed nothing very remarkable; the cardiac action, however, was noted as being weak and the sounds faint. As she was an old woman, and in a state of dementia, she had not done any work nor exerted herself in any way for months previous to her fatal illness, which came on very suddenly in the following manner:—Whilst reclining on a couch she was seized

with sudden and severe pain in the region of the heart, extreme dyspnœa, collapse, and died in the course of a few minutes.

Post-mortem.—On opening the pericardium a large clot of blood was found, and on removing this there was seen in the wall of the left ventricle a very irregular rupture with jagged edges, infiltrated with blood, and running parallel with the direction of the chief muscular fibres. The heart was empty, and looked small and flattened. The ventricular walls were of a pale brown colour, and presented the characteristic faded-leaf tints or thrush's breast appearance; they were also soft and friable. The carneæ columnæ were mottled with fattily degenerated spots. The right ventricle was not nearly so much affected as the left. The lungs were somewhat emphysematous and congested posteriorly. The liver presented appearances of chronic congestion. There was nothing further worthy of note.

Case III.—S. C., aged 70. She had suffered from melancholia for years, and had become somewhat demented. She was a rather thin woman of average height, with gray hair and eyes, and a tolerably healthy looking complexion, and of no marked temperament. In her youth she had an attack of inflammation of the lungs, and six or seven years ago had another illness, when she had swelling of the feet, legs, and face, and convulsions; and I think these symptoms may be attributed to renal disease. Some months before her death, when her chest was examined, it was noted that there was a distinct pulsation in the scrobiculus cordis, that the area of cardiac dullness was increased, that the apex beat was diffused and feeble, and the sounds faint; the pulse, also, was small, feeble, and compressible. She, however, enjoyed tolerably good health for a person of her age, and on the day preceding her sudden death nothing unusual was observed in her bodily condition. In the morning, and just when about to get up, she was suddenly seized with pain in the cardiac region, gasped for breath, and rapidly became insensible and expired.

Post-mortem.—The pericardium was found filled with dark blood, and on removing it there was found in the wall of the right ventricle a very distinct and jagged rent about an inch and a half long, and running in a direction from base to apex. The ventricle was considerably dilated; the walls were thin, and presented the usual appearances of advanced fatty metamorphosis. The left ventricle was hypertrophied and showed signs of fatty change, but in a less advanced stage. The liver and kidneys were undergoing fatty changes. The other organs presented no interesting pathological changes.

Microscopic Examination.—The striæ of the muscular fibres were lost or indistinct, and granules of fat and oil globules were seen in abundance. In a word, the specimens presented the usual characteristic appearances of fatty degeneration.

I must apologize for the incompleteness of my notes, both as regards the history of the cases, the physical signs observed previous to illness, and also the post-mortem appearances; but, such as they are, I venture to hope they may possess interest for some of your readers, and would draw attention to the following points of resemblance in the three cases:—Thus in all three patients the rupture occurred spontaneously; not one of them was making any undue exertion when the accident happened; all three had been for many years insane; they were all nearly the same age—two were 70 years old, and the other 66—and in none of them were there any special symptoms of fatty degeneration of the heart. In two of the cases there was no history of any predisposing cause of fatty disease, except insanity; but the other, S. C., had suffered from renal disease, and in this case the rent was found in the right ventricle, where it is most exceptional for spontaneous rupture to occur.

Such cases as the above, I think, present very distinct evidences of how insidiously degenerations of a grave character may progress in the insane, and yet not produce any special symptoms to attract our attention. They also should strongly impress upon our minds the necessity of insisting on the most gentle treatment of all persons suffering from mental disease, whom we may suspect of being subjects of degenerative changes in the circulatory system. Had one of these patients been very obstinate and troublesome, and resisted nearly everything it was necessary should be done for him,—take, for instance, forced alimentation,—and rupture of the heart occurred whilst the patient was in the hands of attendants, though using no unnecessary force, or in the act of being artificially fed with the stomach-tube, the result would not have been very pleasant to contemplate.

BOOK REVIEWS AND NOTICES.

Tenth Annual Report of the New York State Commissioner in Lunacy, for the year 1882.

Assembly Document, No. 172. Albany, N. Y., 1883.

Dr. Stephen Smith entered upon the duties of this office about the first of June, 1882, and in the amount of work reported by him for the first seven months of his incumbency, he has demonstrated the *raison d' être* for such an officer as that of the State Commissioner in Lunacy.

This office was created in 1873, and was originally attached to the State Board of Charities; but in 1874 the Commissioner was required to report directly to the Legislature.

Dr. Smith handsomely refers to the services of his predecessor, and very justly says of him:

> In laying the foundations of a State jurisprudence of insanity, my distinguished predecessor, Professor John Ordronaux, M. D., brought to bear upon the duties of the office that profound knowledge of medico-legal science, and that calm and mature judgment, so essential to the success of pioneer work in every department of government. It is due to his laborious studies and carefully recorded opinions, that his successors will be enabled to encounter successfully new and untried duties, and to construe judicially the many difficult and abstruse questions which frequently arise in the performance of official duties.

The Commissioner reports the number of insane in the State, October 1, 1882, as 10,876, as against 10,057 in 1881, and 9,537 in 1880. These were distributed as follows: In State hospitals for acute cases, 1,310; in State asylums for chronic insane, 2,049; in city asylums and almshouses, 4,746; in county asylums and poor-houses, 1,956; in the criminal asylums, 141; in private

asylums, 503; insane emigrants, 171. Not including the last item, the proportion of the sexes was 4,709 men to 5,996 women.

The broad general classification of institutions is into—1, County Institutions; 2, State; 3, Private.

There are thirty-four counties not authorized to take care of either their acute or chronic insane, but which are required by law to send their chronic insane to the State institutions at Willard and Binghamton. And yet in the poorhouses of these counties during the year, from October 1, 1881, to October 1, 1882, there were 172 admitted, 125 discharged, and 36 deaths, leaving 639 remaining; and of them large numbers are classified as "subject to paroxysms," or "continuously violent," or "destructive," or "filthy," leaving little more than half as "continuously quiet." The Commissioner remarks, that restraints and narcotics are apt in such places to be substituted for attendance; and that it has frequently happened that more insane were found under mechanical restraint in county institutions with 50 to 100 patients than in State asylums with from 100 to 1,700.

While in the nineteen counties assigned by the State Board of Charities as the "Willard Asylum District," there has been an increase in the number of insane in poorhouses, doubtless owing to the filling up of that institution; in the twenty-two counties allotted to the Binghamton Asylum, there has been a slight decrease. By the efforts made to carry out the original intent of the Willard Asylum Act, which was to empty the poorhouses of their insane inmates, it would appear that up to this time the result has been reached that some ten or eleven of the sixty counties of the State no longer have insane in their poorhouses. Dr. Smith's

conclusion from this result is "that under the present system the chronic insane are not only not likely to be removed from the poorhouses, but on the contrary, that their population is too gradually increasing." A table is presented showing that the opening of the Binghamton Asylum has not had the desired effect of removing the insane from the poorhouses of the counties assigned to it. October 1, 1881, the number of insane in those poorhouses was 365. Up to March 9th, 1882, the number admitted to Binghamton was 133, of which *only 26* had been transferred from the poorhouses. We observe that 51 were admitted to Binghamton from Westchester County. In the report of the Hudson River State Hospital, it appears that the number of insane in that institution from Westchester County alone, had diminished from 84 to 14. It will be found that the transfers are chiefly from or through the State hospitals for acute cases; although this of course prevents their return to the poorhouses.

The problem of securing the care of the chronic insane in State institutions can not, therefore, be said to have been fully solved. So far was the Willard Act from meeting the case, that in 1871 a law was passed empowering the State Board of Charities to license any county under certain conditions to take care of its own chronic insane. This has been done already for fourteen counties; and although the State Board has adopted stringent conditions as to "sufficient and proper buildings," and rules and regulations for their government which should approximate their internal management to that of the State institutions, yet it would seem that the results of this policy "have never proved satisfactory to the State Board itself, which in its last report strongly favors the removal of the chronic insane from county to State care." Dr. Smith thinks that the fatal

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difficulty here is the "attempt to engraft upon the pauper establishment a new and entirely different institution in all its purposes and aims." Notwithstanding all the improvements made in county houses, and the erection of separate buildings for the insane, the standard of care prescribed by the Board would entail an expense and an amount of administrative labor that would make it cheaper for most counties to send all their insane to State institutions. We can not, however, recognize the report of the Ontario Board of Supervisors as decisive on the question of separate county provision, because that county is in the immediate neighborhood of Willard, and the very material item of transportation could be left out of account. But there is great force in the Commissioner's strictures upon the condition and management of county institutions, and none the less as to those which have existed by prescription, so to speak, in the counties of New York, Kings, and Monroe, upon the last of which he is specially severe. The inveterate evils of these places are that the number of patients is usually treated as a "constant quantity," and no provision made for expansion; that the whole matter is associated with the other pauper charities, and everything subjected to frequent political fluctuations. He suggests that their anomalous position can be remedied only by the organization of independent governing boards, removed from the exercise of political influences. For the metropolitan counties he recommends a farm and buildings for the men patients, reserving their present accommodations for women.

As to this whole matter of county provision, and the growing tendency in counties to retain their chronic insane at home, there are sufficient reasons for the present state of things which were foreseen many years ago,

when the American Association of Medical Superintendents laid down the principle that the only effective provision for insanity is the establishment in each State of a sufficient number of mixed asylums to care for all its insane, both acute and chronic cases.

Among the resolutions adopted by the American Association in 1866, was the following:

3. "The large States should be divided into geographical districts of such size that a hospital situated so near the center of the district will be practically accessible to all the people living within its boundaries and available for their benefit in cases of mental disorder."

It was on this line that the establishment of new institutions like those at Buffalo and Poughkeepsie and Middletown, were advocated years ago. The endowment of each of these institutions with considerable tracts of land, itself implies the utilization of the labor of the insane as primarily a hygienic measure, and next as a means of aid in support. The carrying out of the principle of this resolution would have superceded the present difficult complications of county provision. The single points of *transportation to a great distance*, and accessibility to friends and relations who ought not and do not desire to lose sight of the afflicted members of their families, are alone enough to render inadequate and ineffective any plan of one or two large retreats in the State for the custody of the chronic insane alone. Undoubtedly these considerations have been most potential in the improvement of county houses, and the retention therein of the pauper insane. The Willard act did not provide that after it opened it should be filled first by the transfer of the insane in the county houses, but gave equal authority to transfer to it chronic cases from the other State asylums. Thus the State asylums

instead of the county houses were in process of depletion. Many cases have been transferred who might have been benefitted by further hospital treatment. At Willard Asylum, out of the total number of admissions to October 1, 1882, being 3,150, there were discharged recovered 88, and improved 235. As early as 1872 the Trustees of Willard Asylum, anxious to carry out its legitimate purpose of removing the insane from the county poorhouses, and seeing the actual working of the system, made the following suggestions in their report: "We would suggest not only the enlargement of this asylum, but that some additional provision be made at Utica and Poughkeepsie, at Buffalo and Middletown as they progress and are occupied, so that those institutions be enabled to keep and provide for their chronic cases. We refer to those indigent persons supported by the counties, sent for treatment and cure, but who pass into the chronic stage of the disease instead of being sent here or to the poorhouses. If this asylum is filled up from the other State institutions, we can not carry out one of the great purposes thereof, viz.: the removal of the chronic pauper insane from the county poorhouses." This would require the accumulation of too large a number of people in one institution and under one head. The State institutions for the acute insane are as large as they should be, when completed.

To meet this state of things we find the State Commissioner in this report discussing "*the methods of utilizing the State Asylums.*" Under this head he says: "All the asylums for the acute insane have large farms that are now uncultivated for the want of the common labor which the chronic insane can supply. Cheap buildings can be erected on these farm lands for this class, which at a mere nominal expense, will be well

adapted to their wants. If every State asylum was organized on the basis of caring for the chronic insane poor, not only would no more of this class be returned to the poorhouses, but provision would soon exist for the accommodation of all the insane in the poorhouses which it is desirable to have removed."

This plan is substantially in accordance with the suggestion of the Trustees of the Willard Asylum, and was enunciated in the report of the State Board of Charities for 1871. The *crux* of the question in the present state of things with Boards of Supervisors is the *expense* of the State care. In the opinion of the State Board "the principles as to cost of maintenance of Willard Asylum can be extended to all existing and future hospitals for the insane." This is proposed to be accomplished by a system of cottage groups on a simpler and less expensive scale of accommodations, all under the supervision and care of the existing corps of officers in the present State institutions. We doubt the feasibility of such a plan or its practical utility. Such a scheme might empty the county houses if accompanied by a compulsory law forbidding the insane poor to be taken care of in the counties, but the tendency would be to demoralize and lower the standard of care in the institutions where such a double-headed plan should unfortunately be located. There can be but two schemes as a system of care. One with hospitals for the acute insane, and asylums for the permanent care of the chronic and incurable, as now adopted in this State. The other, where each State hospital would receive for treatment and care all within its borders. The supervision and care of chronic insane in a group of buildings on the grounds of an hospital, for acute cases, by the officers of such a hospital, would only be *nominal*. We are satisfied that no such scheme

could be made practically efficient, however it may look as a theoretical proposition.

In 1877 the trustees of Willard Asylum reiterated their suggestions on this subject, going more into detail, and the trustees of the Hudson River State Hospital have in some of their successive reports since 1869, urged the plan upon the attention of the Legislature, with a view to reduce both the cost to the State of the necessary buildings, and the cost to the counties for the maintenance of patients. The plan assumes that within practicable limits, the larger the number under one management, the less the cost *per capita*. In England several county asylums have over 1,000 patients, and at Hanwell and Colney Hatch the number approximates 2,000, which Lord Shaftesbury deems a practicable magnitude, where so large a proportion consists of quiet cases. Dr. Smith cites the plan proposed at Poughkeepsie. It is "to have upon the Hudson River Hospital grounds buildings for the two sexes entirely separated, and at a distance from each other; to build on the eastern part of the farm a small hospital for men, with accommodations for fifty cases of acute insanity, so planned as to be capable of future enlargement; to put up in the same neighborhood simple and inexpensive buildings, suitable for chronic cases; to be added to as required; until provision is made for a thousand or more men-patients, the present hospital structure being reserved for women." It is thought by this plan of separating acute and chronic cases, the cost of support for the large majority of the patients need not exceed two dollars and a half per week. (At Willard and Binghamton the weekly cost charged the counties is $2.65.)

The Commissioner mentions that four of the counties that once formed the district assigned to the Hudson

River Hospital have recently adopted resolutions strongly urging upon the Legislature the establishment of a department or branch to that institution for the care of the chronic insane; and he remarks upon those resolutions as follows: "These resolutions embody the strongest features of the argument in favor of utilizing existing asylums, viz.: The cost of transportation to distant asylums; the importance of retaining the insane near their friends; the reduction of the cost of maintenance where large numbers are aggregated; the adaptation by location and farm lands of State asylums for such provision, &c." In connection with the subject, he gives a description of the cottage or group system as carried out at the asylum at London, Canada, as furnished by the Superintendent, Dr. Bucke. Whatever difference of opinion there may be as to details, the Commissioner brings a strong argument for returning to the original system of mixed State asylums, caring for all classes of the insane, in which case, as the State Board of Charities has intimated, as long ago as 1871, the present asylums for the chronic insane would take their place among other State hospitals, and receive their territorial proportion of acute cases. And on this plan the Commissioner is strongly in favor of having the State *districted* among the various State institutions; and in devoting a page or two to an argument in its favor, he simply rehearses the cogent considerations heretofore urged by the Association of Superintendents of Asylums.

As this subject of the care of county patients is unquestionably the most important of all the branches of provision for the insane, we make no apology for dwelling so long upon it, nor for copying the conclusions with which Dr. Smith sums up this part of his report.

The suggestions contained in the preceding remarks are: 1. That poorhouse care of the insane be discontinued. 2. That the State asylums should retain their chronic insane and provide for them in cottages on ample farm lands. 3. That the State asylums should become mixed asylums. 4. That the State asylums should have defined districts within which they shall care for all of the insane poor.

If the policy of this State is settled in favor of State asylums for acute and for chronic insane, or of mixed asylums for both, then let us have such a system; but the policy should not be disturbed by trying experiments of the two classes of institutions under one Superintendent.

There are fourteen counties exempt by the State Board of Charities from the Willard Asylum act and licensed to provide for their own chronic insane. The number of patients thus cared for in these counties, October 1, 1882, was 1,239, of which 500 were men. The admissions during the year had been, 383; the discharges, 213; increase over last year, 42. Many of these institutions have idiots and epileptics in them. The notes of inspection show in many cases a sad falling short of the standard prescribed by the State Board, and in some cases an excess of numbers allowed by the license. They are of course an immense advance on the former poorhouse system, and in some there is a fair approximation to the approved methods of treatment and surroundings. The State Board will doubtless feel some responsibility in bringing all up to the standard.

There still remain four counties that take care of their own insane, by custom and special acts: New York, Kings and Monroe, which provide for both acute and chronic cases, and Clinton for its chronic alone. The total number in the various institutions of these counties October 1, 1882, was, 4,192. In New York there are six public institutions with a total population

of 2,734, an equal number of each sex. That for females on Blackwell's Island has 1,369 inmates, and those for men on Ward's and Randall's Islands count 1,365. The admissions during the past year were 1,028; discharges, 547; deaths, 374. On Blackwell's Island besides the main building there are nine pavilions for the quiet and harmless, a lodge for refractory wards, and a retreat for the more disturbed cases. The new structure for men on Ward's Island, is modelled after the usual plan of State asylums, and has an "Annex" for harmless chronic cases. In default of a farm, it is remarkable what an amount of labor has been organized in this institution, in the way of mechanical trades, the number constantly employed being about 400. There is a printing establishment employing inmates which is said to save to the department of Charities about $12,000 annually. Drs. Macdonald and Franklin are conducting these asylums in a notably successful manner, considering the limited facilities afforded them. It is to be hoped their labors will lead to a more liberal policy in the city government, and to the final establishment of a large institution for the chronic insane men on some well selected farm at a greater distance from the heart of the city.

The State Institutions are—first, for the acute insane; second, for the chronic; third, for insane criminals; fourth, for insane emigrants. What specializes State asylums as much as anything else is that they are built by the State and are under the control of Boards of Managers, holding office for a term of years, under appointment by the Senate, on the nomination of the Governor. At present these boards vary in numbers in different institutions, but the Commissioner believes it desirable that they should be organized on a common basis of name, numbers and powers, to which

certainly there can be no objection. The asylum at Utica is the only one whose managers are required (a majority of them) to reside in the vicinity of the institution.

These State institutions are subject to the control, direction and visitation and close inspection of their own Boards of Managers, who are held by law to a strict supervision. They are also subject to the visitation of the State Board of Charities, and of the State Commissioner in Lunacy, all of whom must report the results of their examination to the Legislature, with any suggestions that the condition and management of the institutions may seem to call for.

The New York State Lunatic Asylum, at Utica, was created by act passed March 30, 1836, and was opened for the reception of patients, January 16, 1843. Dr. Smith traces a very succinct but correct history of this institution since its inception. The capacity is about 600, there being twenty-four wards, twelve for each sex, besides the necessary appendages, as dining-rooms, bath-rooms, etc. The results of the Commissioner's visits seem to have been perfectly satisfactory and he specially commends the pathological laboratory. Since its opening the admissions have been 14,863; discharged recovered, 5,379; improved, 2,140; unimproved, 4,634; died, 1,881; not insane, 251; total number discharged, 14,285; number remaining, September 30, 1882, 578.

The Hudson River Hospital was opened in 1871. There are completed a central building and one wing of three sections of wards connected by low corridors. Since its opening the total number of admissions has been 987 men and 895 women; recovered, 396; improved, 224; discharged unimproved, 734; died, 303; not insane, 6; remaining October 1, 1882, 219. The Commissioner's inspection was very satisfactory, the

condition of the hospital being "found to be excellent in all its departments."

The State Homœopathic asylum, at Middletown, was incorporated in 1870, and occupied for patients since April, 1874. The total number of admissions to October 1, 1882, had been 1,199; discharged recovered, 431; improved, 142; unimproved, 256; died, 121; not insane, 4; eloped, 5; remaining, 240.

The Buffalo State Asylum was opened in November, 1880, with the center building and the five buildings of one wing section completed, with accommodations for 300 patients. Since its opening the admissions have been 492; discharged recovered, 74; improved, 39; unimproved, 58; died, 38; not insane, 9; remaining, 274. Everything here was satisfactory except as to deficiencies arising from lack of appropriations by the Legislature, as e. g., for the purchase of the necessary stock for the farm. Some very marked defects in construction, and the air shafts for heating, are pointed out in this institution.

The two State asylums organized solely for the care of the chronic insane are the Willard Asylum and the Binghamton Asylum. The Willard Asylum was opened in October, 1869. Its present accommodations are for 1,800 patients. Since its opening it has received 3,150 patients; discharged recovered, 88; improved, 235; unimproved, 206; died, 843; not insane, 4; remaining October 1, 1882, 1,774. An analysis of their legal residence shows 1,076 patients to be from that part of the State east of the east line of Oneida County, and 684 from the rest, and that too although New York and Long Island send few insane to the State institutions, and there are but six counties in the eastern district in which the Willard Asylum act remains operative, as against eleven in the western. The larg-

est increase from one county during the last year was Westchester, which has now 119 patients at Willard as against 104 in 1881. The Commissioner gives an interesting description of the grounds and buildings from the Thirteenth Annual Report of the Trustees. The results of his inspection were "in every respect gratifying."

The Binghamton Asylum was opened in October, 1881, and consists of the building for the former State Inebriate Asylum, adapted to the accommodation of about 400 insane patients. From its opening, to October 1, 1882, it received 298 patients; discharged recovered, 4; improved, 3; died, 14; eloped, 2; remaining, 275. By law twenty-one counties are assigned to the "Binghamton District." In 1882 there were 325 patients in the poorhouses of those counties, but the new Asylum made little impression on these. The Commissioner says, "the fact was that it drew the patients belonging to these counties in the Hudson River Hospital from that institution, and received but few from the poorhouses." He gives a table showing that of the 274 inmates, October 1, 1882, 170 came from other State asylums, 75 from County asylums and poorhouses, and 29 from their homes. Very naturally the Commissioner remarks upon these facts: "As those taken from one State asylum and transferred to another are simply removed from good and comfortable quarters, it would seem the more prudent course to allow those in the State asylums to remain until all who could be removed from the poorhouses had been transferred to Binghamton Asylum."

The State Asylum for Insane Criminals at Auburn, (the only one in the United States) was opened in February, 1859, and has present accommodations for 160 patients. It stands on a piece of ground of about

eight acres inclosed by a stone wall twelve feet high. It receives not only insane convicts, but persons having committed crimes who escape indictment, or are acquitted on trial, by the plea of insanity. Since its opening, to October 1, 1882, it has admitted 629 patients, of whom but 29 were women; 573 convicts and 56 unconvicted lunatics. Present number 144 men and 9 women. The objection to associating persons of previous blameless lives with convicts is met by the discretion allowed to judges by law to take such facts into account and to dispose of such patients according to their moral and social status in ordinary asylums. The fact is, the most of those tried and acquitted have been more or less in the criminal class. The relations of crime to mental disease is a subject *sui generis* which marks off the criminal insane as a class unlike what is seen in our ordinary asylums. Any scientific as well as practical consideration of this question must lead to the establishment of such institutions in other States.

The Commissioner in his notes of inspection suggests the removal of this asylum to a farm outside the city limits and the application of the present structure to a prison for women alone. The *per capita* cost of support, even with the present arrangements, is shown to be considerably less than at Broadmoor, England. The Commissioner endorses the views of the Superintendent, Dr. MacDonald, that the law should be so modified as to allow the detention of convict patients after the expiration of sentence, and until recovery, instead of sending them to the county authorities, and also that the women patients should be sent to the House of Refuge for women. Of the 629 admissions there were discharged recovered, 166; improved, 67; unimproved, 116; died, 76; not insane, 57; not recorded, 6. The management and condition were very satisfactory.

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The State Emigrant Lunatic Asylum on Ward's Island, New York, was opened in February, 1861, the present buildings completed and opened in 1872. Its principal lack is land for the labor of patients. From its opening to October 1, 1882, the admissions have been 3,640; discharged recovered, 1,857; improved, 637; died, 420; not insane, 44; number of inmates October 28, 1882, 173—males, 92; females, 81. It is gratifying to see that this institution is kept in excellent condition.

There are in the State, *ten private* asylums, seven incorporated by statute, and three licensed by the Commissioner in Lunacy. The list begins with the oldest and largest, Bloomingdale, with 234 patients. October 1, 1882, there were 567 inmates in the ten private asylums, "Homes" and "Retreats."

This report contains a large number of tables. We observe from them several important facts. In the county poorhouses of the State, though the harmless and quiet are in the majority, a very large per centage consists of those who are "subject to paroxysms," "violent," "destructive" or "filthy," for all of whom our poorhouses are certainly no place; while also the fact appears that a very large proportion of those in poorhouses have never had the experiment of treatment in any of our State hospitals. In 1871, only 23¼ per cent of the insane were in State hospitals and asylums, the balance being in the custody of cities, counties and private asylums; in 1880 the ratio had risen to 29½ per cent.

The increase in the number of insane in the State from 1871 to 1880 was 4,505. Taking the State by counties, the number of insane in 1880 is greater by 3,411 than it would have been if kept *pari passu* with the increase of population. This *may* not mean abso-

lute increase, as it is to be hoped that the insane are being more quickly identified and speedily provided for as time goes on. The average ratio of insane and the population in the State is one to every 505. In New York County it rises to one in every 343; in Oneida to one in 379. Even in rural counties like Ontario and Cortland it is one in 470 and one in 527 respectively. Nine counties, Essex, Greene, Rockland, Tioga, Wyoming, Allegany, Clinton, Warren and Hamilton shows less than half the average ratio, the last giving one to every 1,967. These counties seem to be largely in the mountain regions or more sparsely populated districts of the State.

There are many cases of readmission. At the State Lunatic Asylum out of 412 admissions during the last year, 57 were readmissions. At the Hudson River Hospital, of 211, 15 were readmissions; at Middletown, of the 175 but one was readmission; at Buffalo, of 276, seven; at Blackwell's Island, of the 413, 89; at Ward's Island, of 426, 51; King's County, out of 358, 107. The readmissions do not show what proportion had recovered. The statistics as to education, civil condition, occupation, &c., are of value only as they can be compared with the relative distribution of these particulars in the community at large. As to the probable occasional causes of insanity, "general ill-health," "overwork, grief and loss of sleep," puerperal incidents and intemperance seem to be the most fruitful. Of the 412 admissions at Utica 31 were cases of paresis, and 10 of epilepsy; at Poughkeepsie, 30 of paresis and 10 of epilepsy to 211 admissions; at Middletown, eight of paresis and eleven of epilepsy to 175 admissions; at Buffalo, 21 of paresis and 17 of epilepsy in 273 admissions. The *duration* of the insanity previous to admission is in a large number of cases unascertainable.

Out of 412 admissions at Utica 190 had been insane for one year and upwards; as many as 140 of them two years and upwards. Such a proportion of what we call "chronic" cases on admission still too generally prevails, showing that a great deal is yet to be done in making the public *realize* the importance of early or immediate treatment for insanity.

As to *transfers*, Willard has received during the year from Utica 59 patients; from Hudson River, 29; Middletown, two. Binghamton has received from Utica 67; from Hudson River, 93; and Middletown, 19; Exempt County Asylums, 21. The *recoveries* in all the institutions are chiefly under the heads of melancholia and acute or sub-acute mania. No recoveries are recorded from paresis or general paralysis.

The suicidal cases at Utica were 112 and the homicidal 75, many of them being cases in which both tendencies were combined; the whole number of persons being 164 out of 412 admitted. These proportions nearly hold good elsewhere.

Of the 412 admissions at Utica, 79 were private patients; of 211 at Poughkeepsie, 55 were private; of 175 at Middletown, 110 were private; of 239 at Buffalo, 34; of 358 at King's County, 70 were private and 44 "State." We do not understand the figures given under this head at Binghamton.

The Commissioner reviews the opinions and practice prevailing in the various institutions on the subject of *restraint.* The principles generally adopted are substantially those that have been set forth in this JOURNAL from time to time, and enforced in the Annual Reports of the State Asylum at Utica. The Commissioner quotes at length the conclusions stated in Dr. Gray's Reports for 1880, which it is confidently believed no experience will be found to change in any

essential degree. Probably the main differences of opinion may relate to the form of restraint which is inevitably, even though but occasionally necessary, whether it should be manual (by muscular force,) or mechanical (by artificial appliances) or "chemical" (by administration of sedatives,) or by seclusion or solitary confinement. It is hardly necessary to discuss the relative merits of these methods. There is undoubtedly a constant and gratifying diminution in the use of restraint of all kinds, due to increased number of attendants; to improved interior construction of hospitals; to greater extent of grounds offered, and privileges of outdoor air; to greater resources for amusements, and for the regular employment of patients in either indoor or outdoor work. Any disuse of restraint that will come from these means ought to be and is gladly welcomed. But personal force is certainly the worst and most exasperating kind of restraint.

The following suggestive extract from Dr. A. E. MacDonald's report for 1880, of the New York asylum, illustrates some of the alternatives in this matter:

> We have neither entirely discarded, burnt nor hidden our restraining apparatus. Yet, perhaps, we thrust fewer patients into rooms, and use dozy restraints less frequently than some more celebrated alienists. We use no wet pack *to avoid restraint.* We do not macerate our patients in hot water by the hour, so that they may not need the camisole. We do not place heavy attendants on their knees when seated, nor on their breast bone when in bed to avoid the use of waist or bed straps. In fine, we are not sufficiently new in intercourse with the insane to believe in the possibility of *real* non-restraint, nor sufficiently old in moral legerdemain to pretend to do what we know is beyond *our* power.

In the matter of *employment* for the insane, there is much more general consent. The Commissioner finds the usual objection among some patients against working "for the State" without wages, which leads him to

suggest the expediency of paying a small sum to such as can earn more than their cost of maintenance, to be accumulated as savings, or to be applied to the benefit of their families. This would be safe, but who would be umpire? Those who refuse are the bad and lazy. In some institutions, as in New York, many mechanical trades are carried on, as at Ward's Island already mentioned. Even in private asylums it is thought moderate labor would be better than a continuous round of amusements. Doubtless a good farm furnishes the best kind and variety of labor for the hygienic purposes of an institution for the insane. The Commissioner gives the average per cent of men employed in the Utica Asylum, 49.89; of women, 51.38; in the Hospital at Poughkeepsie, men, 65 1-12; women, 45 7-12; at Willard, men, 38.2; women, 37.6; at Middletown, men, 23.63; women, 12.54; at Buffalo, men, 64.77; women, 58.40; at Binghamton, men, 40; women, 36.3. With proper surroundings and sufficient variety of occupation, these averages even in the institutions for acute cases, may be increased, large as they are already.

The Commissioner speaks in the highest terms of the steps taken to promote pathological investigations, as in the department already instituted at Utica; and recommends the further development of this movement.

The laboratory established in the State Lúnatic Asylum was a step in the right direction and is very creditable to the State. Already the scientific investigations performed in that laboratory have settled some disputed points in cerebral pathology which could only be determined by those minute and precise methods of study with complicated and elaborate apparatus which the State only can afford to maintain.

We need but examine the variety of work performed in this laboratory during the past and current year, to estimate the value of similar departments connected with other State asylums. Ante and post mortem examinations, microscopic and chemical analysis, micro-photographic illustrations and hand drawings, show an

amount and kind of work quite surprising. In five years 1,718 analyses of urine of inmates of the asylum were made for the purpose of studying the condition of the secretion in various forms of anæmia. This was the work on a single subject.

On the subject of *letters* or correspondence of the insane, the Commissioner states that he has as yet found no letters detained by asylum officers, which on examination, in his judgment, should have been forwarded. After quoting Lord Shaftesbury on this subject, he acquiesces in his view that the responsibility can not very well be left otherwise than it is upon the medical officers.

The Commissioner has a brief section on the proposal to introduce women-physicians into the staff of asylums; and seems inclined to indorse it. We can not go with him here. We object to a mixed medical staff. The difficulties described under the present system we are satisfied, are purely imaginary, and afford a beautiful instance of merely theoretical argument. No advantage supposed to be gained by such an arrangement is at all unattainable under the present. And here we can not help thanking Dr. Smith for a suggestion *against* such an innovation, that possibly might not have occurred to us. He reproduces a letter from Dr. Goldsmith, of the Danvers Asylum, warmly commending this movement, in which he says: "If there are more than two assistant physicians in an asylum for both sexes, I would try to have one of them a woman; but I would not advise the appointment of more than one woman under the same roof, even if the staff were larger."

We can not help thinking that there is at least a *soupcon* of feminine reasoning in that qualification.

The argument made against male physicians in female wards is equally applicable to general hospitals and general practice, and if carried out, would inhibit all

practitioners from having anything to do with the diseases of women. It would simply amount to the State's forcing upon women patients a kind of medical service which they never before employed, and to which many of them would strenuously object. We can by no means accept such a random statement as is here unreservedly made, as applicable to the State asylums, "that many cases of insanity among the insane women in asylums fail of proper treatment through the lack of that special care which a woman physician would supply." If the medical profession generally can endorse that statement, there has been a great change in facts as well as opinions that we have not as yet had any indication of. For all the special purposes enumerated that are supposed to make female physicians desirable, the matrons and female supervisors and attendants at present employed are amply sufficient. We would commend to Dr. Smith's attention the facts in regard to the administration of the Woman's Hospital in New York, and the Lying In department of the Hospital on Blackwell's Island, in respect of this question; for we suppose they may be quite within his observation It is a pity to have a great public interest threatened with perpetual theorizing.

In this connection the Commissioner refers to the gratification patients express in having an opportunity to converse with him, and he makes the suggestion that "there should be on every ward some person adapted to be a companion to patients whose whole duty should be to converse with them, engage them in conversation, &c." These are the duties of the supervisors and attendants. We do not think it would be practicable to have one class "whose whole duty should be to converse," etc., while another class is given simply the manual work. The whole body of attendants would soon

degenerate if the most important and responsible part of their duties should be taken off their hands in this manner.

We regret exceedingly that the late Gerritt Smith's name should have been mentioned in this connection. The Commissioner says: "The late Gerritt Smith gave as his experience in asylum life, a similar account of the injurious influence of the insane on the wards or with whom he came in contact. Their incoherent ravings and profane and vulgar talk shocked and depressed him, and made him crave the companionship of a congenial and intelligent person."

The Commissioner has been misled. Mr. Smith was never on any but the first ward, where there are neither "incoherent ravings" nor "profane or vulgar talk." On first arrival he was in such a feeble and exhausted condition that the Superintendent accompanied him to the ward, assigned him a double room, and remained with him until he was put into bed and proper nourishment and stimulants administered. The special attendant detailed for his care was one who had been in Mr. Smith's own employ, in his own home, and by him specially recommended as a model person for asylum service. While on the ward Mr. Smith took his meals in his own room, being most of the time too feeble to be out of bed, and as soon as he was able to be about he left the ward and became a member of the Superintendent's own family until his return home.

The Commissioner makes the statement that the Rev. Dr. Hall had paroxysmal insanity, and was often admitted to asylums in England, and "begged, in his sane intervals that he might not be placed on the common wards where he was subjected to the repulsive language of the insane." This would indicate that the Rev. Dr. Hall was subjected to treatment without due and

proper classification in the asylums, and only tends to enforce remarks already made in regard to classification.

The Commissioner has one chapter, page 123, on "Methods of Utilizing State Asylums." Under this head he says: "All the asylums for the acute insane have large farms that are now uncultivated for the want of the common labor which the chronic insane can supply."

We think this statement should be modified. The State asylums for the chronic insane have large farms. Willard has some 800 acres, and Binghamton over 400 acres. All the asylums for the acute insane have not "large farms," nor have any of them larger farms than they could cultivate. Cultivation for the economic uses of such hospitals should not only mean land to be worked for gardening and the growing of coarser vegetables, as beets, potatoes, &c., but also for grazing for cattle for the supply of milk. At Buffalo there are two hundred acres, forty of which are devoted to the buildings and grounds necessary for the exercise of patients. It is true that the asylum has not done much heretofore in the way of cultivation and grazing, because neither implements nor stock were supplied by the Legislature at the opening of the institution. A system of farming and gardening, however, has been instituted which will undoubtedly utilize every acre of land. At Utica there are only two hundred acres, and thirty acres are taken up with buildings and exercising grounds. The managers have for years been urging upon the Legislature the necessity of more land for the labor of patients and the economy of conducting the institution, and have had to rent additional land. The asylum at Poughkeepsie has a large farm of 333 acres and that at Middletown has only 211 acres. Neither the institution at Poughkeepsie nor that at Middletown is filled with

patients, and the former is incomplete—in fact only half finished; and the buildings of the Buffalo Asylum are in the same incomplete condition.

We are sorry that the Commissioner says nothing about the completion of these hospitals for the reception, proper care and treatment of acute cases, so as to meet insanity on its very threshold and prevent, as far as possible, the increasing volume of chronic cases.

The Commissioner, instead of advocating the completion of these institutions and the perfecting of the system adopted by the State, goes on to recommend cheap buildings to be erected on these farms "at a merely nominal expense, for the care of the chronic insane." This in fact would be merely locating the aggregated county asylums on the farms occupied by the State asylums. The rest of the chapter consists almost entirely of quotations from the reports of the State Board of Charities Aid Association, Trustees of the Willard Asylum, the Managers of the Hudson River Hospital, resolutions of County Boards of Supervisors, and Dr. Bucke of the London (Ont.) Asylum, relating almost wholly to the care of the chronic insane, and incidentally discussing the two systems of care of the insane by the State, that is, all hospitals receiving acute and chronic cases from circumscribed territorial limits, or the present system of the State of separate hospitals for the acute and chronic insane.

The tendency of the whole argument and the quotations are in the direction of his final conclusions that all of the State asylums should "care for both the acute and chronic insane," and he adds: "There can be no doubt that this change would render them both more useful and more efficient and they would then be on the same footing as the most efficient civil hospitals, which have their departments for acute cases, for convalescents and for incurables.

While we do not think that hospitals for the insane can be arranged literally like ordinary hospitals with "wards for acute cases, convalescents and incurables," we do think the union of acute and chronic cases the best. A properly organized and classified hospital for the insane will be found to partake more of the nature of a home than of an ordinary general hospital, and the classification is not based arbitrarily upon the stages of the disease, but upon the condition of the patients as represented by the power they have of self-control, manifested in their speech, their habits and personal care of themselves. Each ward therefore represents a degree of self-control and self-direction. Any person making a careful observation of the patients in any institution properly organized and classified would find on what are sometimes called "convalescent wards," recent cases and convalescent as well as chronic cases of many years' standing. Extended means of classification by a large number of wards in institutions, where all classes of insane are received, is of vital consequence, and constitutes largely its power for usefulness. In this way alone can any institution, admitting all classes, secure order, discipline and quiet in the wards, and give the highest chances of recovery. Indeed, the experienced, judicious and vigilant medical attendant shows his ability, in the medical and moral direction of such an institution by the constant changes from one ward to another as the condition of the patients may change. He thus secures the favorable influence of one person upon another instead of the endless and injurious friction which would occur from a simple arrangement or classification according to the stages of the disease.

No institution receiving patients generally should have less than twelve wards for each sex, and if the

institution exceeds 600 in number there should be sixteen wards for each sex. Wards for the quiet and self-controlled may be large enough to contain forty patients and the necessary attendants, but for the best working of an institution the number should not exceed thirty, and the ward for the most disturbed should not exceed sixteen. The Commissioner finally quotes from the resolutions of the Association of American Superintendents of Asylums that "neither humanity, economy or expediency can make it desirable that the care of the recent and chronic insane should be in separate institutions."

In a matter of such great consequence to the State as this class of public charities, we should be inclined to say, "one thing at a time," and complete it. We should be very sorry to see the uncompleted institutions at Poughkeepsie and Buffalo diverted from their original plans by any temporary expedients. We believe it would be far more to the public interests to complete these structures before the proposal of any such outposts as cheap buildings or any other kind of buildings about the grounds for the care of the insane, whether acute or chronic, is carried out. These hospitals, standing, as they are, are not only incomplete as structures, but they are incomplete for hospital uses, and practically perverted from their original intent and purpose. They were projected as double hospitals, one for each sex; separated by a central or administration building, each hospital to have such extent of buildings and wards as would enable a proper classification to be made for the best care and recovery of the insane, and to carry out at the same time not only complete separation of the sexes, and such classification by extended ward system, but separate grounds, so that the sexes would not overlook each other when in outdoor exer-

cises, amusements, etc. As they are now arranged, there is but half the extent of classification which experience shows to be necessary, and one sex is placed over the other, ignoring the sound principles on which these hospitals were projected. It certainly would be a great pity to have such wise and noble beginnings stopped half way, and a system substituted of inefficient expediency. Although it may seem premature to discuss this apparently incidental point here; we bear in mind that after all the principal point raised by the Commissioner is that of placing buildings for chronic insane over the grounds of the hospitals for the acute cases, at a distance from the center or governing point. We doubt the feasibility of any such plan or its practical utility. Two systems, one of proper hospital care, and the other of cheap custody—could not survive harmoniously upon the same grounds, and cheap care, under such circumstances, can mean nothing but inefficient care. Furthermore, we should deprecate any attempt towards any such large increase of numbers in connection with any institution as would render proper professional services and responsibility impossible to any superintendent. We doubt whether any institution for the acute insane should go over 600 patients, and no institution receiving both acute and chronic should go beyond a thousand. We are well aware that in Great Britain they have been extended to double this latter number, and have approximated this in our own State.

If the institutions, however, are to be enlarged we should much prefer to see all the buildings brought so near together that they could be readily visited by the medical officers as well as officers having the charge of other matters relating to the institution. At the Willard Asylum, where the buildings are so widely

separated, it has been found necessary to connect them by railroad, and place responsible medical men in each of the buildings—practically a series of asylums nominally under one head. If it is proposed to follow the course suggested by the Managers of the Hudson River Hospital, which the Commissioner quotes, and erect a series of buildings on one part of the farm for the care of men, (and their proposition is to make such an institution ultimately receive one thousand men), and take the old structure for women only, then we simply have a system of double hospitals. The Pennsylvania Hospital, under the guidance of Dr. Kirkbride, adopted this system a number of years ago, and though Dr. Kirkbride remained nominally the head of both institutions, the editor of this JOURNAL has heard him say that it would not be continued; that ultimately there would be a superintendent and a full medical staff for each institution. At Kalamazoo, Michigan, after the original double hospital was filled, two separate institutions erected for men and women were filled to overflowing, and further provision being demanded for the insane, another series of buildings were erected on the grounds of the asylum, but on the erection of an institution subsequently in the eastern part of the State, at Pontiac, they returned to the old system of bringing the two sexes into one double institution.

Though we are obliged to differ with the Commissioner in some things, on the whole we consider the report one of great value and importance. It gives a complete view of this department in the State, and ought to be of service as a guide to future legislation.

Lehrbuch der Psychiatrie (*Text-book of Psychiatry.*) By Dr. Rudolph Arndt, Professor of Psychiatry, etc., at the University of Greifswald. Wien & Leipzig: 1883.

After and concomitant with the publications of Griesinger's Pathology and Therapy of mental diseases, 1845–61–71, there was a period of incubation, if we may be permitted to say it, in German psychiatrical literature. By some writers as Schilling, Laehr, Brosius, and others, psychiatrical questions were brought before the public in a more or less popular style and composition. In others, as Ideler, Erdmann and Knop, the psycho-philosophical, or even metaphysical stand-point prevailed, in others the practical, as in Ricker and Erlenmeyer. The rest of the literature, although perhaps the most valuable portion of it, was deposited in special journals and periodicals mostly for the benefit only of specialists. During the last ten years, however, quite a number of substantial text books and hand books have appeared, which we had from time to time the pleasure of announcing in this Journal. The latest of these is the one before us by the famous Greifswald professor and director of the provincial asylum for the insane at that place: Dr. Rud. Arndt. The author is well known to the profession for his able and original writings on psychiatrical subjects and his observations and researches in the normal and pathological anatomy and histology of the nervous centers. Not less original and in many respects novel, is his book. Proceeding from the proposition that mental life in fact represents only one side of nervous life in general, he makes the attempt to apply to its morbid phenomena the same physiological laws (Pflüger, Wundt, Brenner), which are valid for the over-exerted, the fatigued or the dying nerve.

Insanity, or psychical disorder in general, is, according to this author, one and the same, and the various forms, in which it manifests itself are phases only in the general course of the morbid process. This is most clearly marked in Arndt's "Vesania typica," typical insanity; often more difficult to demonstrate in other forms. Yet the fundamental character of all psychoses is, that three stages are to be distinguished, more or less pronounced in the individual case, viz.: the primary (initial) melancholic, the maniacal and the secondary melancholic stage or the stadium stuporosum. The first two are corresponding to the condition of the fatigued or dying nerve in its whole first stage, the third to the condition of the exhausted nerve in its second stage. Or, in the words of Pflüger's and Wundt's law, the primary melancholic stage resembles the effect of a weak galvanic current upon a nerve, which is equal to the fatigued state of the organ of mind; the second, the maniacal, that of a current of medium strength, the convulsionary or the exhaustible state; the third, the stadium stuporosum, that of the strongest currents, the exhausted or dying state.

The author, in a very clever manner, and aided by a rich record of cases, mostly original, tries to demonstrate the presence of these three phases or stages or their respective equivalents in all forms of insanity or the phenomenal life of the insane. The varieties which are observed are in part explained as the result of individual condition and character, or of the pre-existence of morbid conditions, as epilepsy, hysteria, hypochondriasis, alcoholism, etc., or of anatomical defects and lesions. The author's vesania typica, for example, is "completa" when all three stages are equally well marked in its course. It is "incompleta" when the one or the other stages is rudimentary only or absent,

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and "abortiva" when only one stage comes to perfection. The vesania typica by the prominent evolution of the secondary melancholic stage, the stadium stuporosum thus developes the vesania katatonica, which may take an abortive course or terminate in dementia katatonica. If the vesania typica *completa* is re-current it is called vesania circularis; if the *incompleta* is re-current, vesania periodica is produced. The connection of the vesania typica with paralytic symptoms, which more or less rapidly extend over the whole system and lead to various trophic disorders and by virtue of these to the final destruction of the organism, is known as the vesania paralytica progressiva, which according to its course may appear in the form of "communis" or "rapida;" etc.

In general all psychoses are the manifestation of a nervous system, more especially the brain, suffering from impairment of normal nutrition. The disturbance in itself is only functional. The forms of insanity are not by themselves diseases of the brain, but symptoms of the same, and, since our psychical life is in fact the manifestation of the life of the whole organism, insanity is an evidence not only of a diseased brain but of disturbances also in the entire nervous system. For this reason the author does not believe it justifiable to take as a basis for a classification of insanity either the anatomical or the etiological stand-point.

As original as Arndt's views of the psychoses is his terminology; it is mostly borrowed from the Greek language.

In chapter I, an introduction is given in which the author clearly defines his stand-point. Chapter II contains a sketch of the histio-genesis of the nervous system; III, individual development of the normal and the defective organ; IV, anatomy of the organ of mind.

The central nervous system, with its appendages, is regarded by the author as a vast reflex mechanism composed of a large number of simple reflex apparatuses, the normal development (enplasia) or defective development (hypoplasia), of which, is of decisive influence upon its function. The evolution of mind takes place in an equal step with the development of the psychical organ. The mental phenomena are a secondary product or a concomitant manifestation of the motions and processes occurring in the nervous system. Its evolution can not be explained. The material conditions however, under which sensation comes into existence, are accessible to scientific research. Chapter V and VI treat of the æsthesiae (sensations); VII and VIII the ergasiæ (actions; motions, secretion, assimilation); IX and X dysaesthésiae embracing the hyper-hypo-an-and paraesthesiae; XI and XII dysergasiae (anomalies of actions); in motions as hyper-hypo-a-and parakinesiae; in secretion as hyper-hypo-an-and parekkrisiae; in assimilation as hyper-hypo-a-and paraplasiae. Chapter XIII discusses the psychoses; XIV the causes of the psychoses; XV anatomico-pathological changes in psychoses; XVI diagnosis and prognosis of the psychoses; XVII, XVIII and XIX, course of the psychoses; XX treatment of the psychoses.

Extracts from the contents of the various chapters would be of little service. The work, as a whole, must be read and studied in order to follow the author and to do him justice. Arndt's style is spirited and expressive, his clinical pictures are graphic, the illustrative cases selected apparently with the utmost care and discrimination, and he has utilized an extensive original material in his book.

On page 162 we read: "According to our opinion morals and a sound psychical life are inseparable. All

immorality is a symptom of psychical disease; * * *" Griesinger said: "No person of sound mind is compelled to commit a crime." I believe that no person of sound mind ever commits a crime. On page 164: all that is called vicious and criminal, is only a contradiction of what is intimately connected with our own and the human society's interest. * * * Each criminal is a diseased human being and deserves our sympathy rather than contempt. On page 167: What is trespass? What is misfortune? Trespass is misfortune and misfortune is trespass. On page 317: All such persons (who have become immoral or insane by want or deprivation) improve mentally in correspondence with their bodily weight. Since in their peculiar and severe diseased state they frequently commit all kinds of misdemeanor or even crimes, of which nothing occurred during their former state of health, we have a right to say that their moral state is dependent upon their physical weight. On page 381, he says: Ethics are based upon sound energy. To behave morally may be under circumstances the result of an easily manageable weakness. Morality is frequently but the simple observation of decorum. * * * Each immoral action, each misdemeanor, each crime is a morbid action originating in morbid motives and desires, yet the perpetrator at large is not therefore necessarily to be regarded as a sick or a diseased person—as long as his positive qualifications still surpass the negative ones."

Arndt's book is a handsome volume of 636 pages. It is printed on heavy white paper and in good type. It has been received in Germany with applause and satisfaction. Undoubtedly it will be read with pleasure everywhere. D.

Compendium der Psychiatrie, (for the use of Students and Physicians.) Von Dr. EMIL KRAEPELIN, Docent an der Universität, Leipzig. Leipzig: Abrm. Abel, 1883.

Some three years ago we had the pleasure of announcing under the same title a little book of 273 pages, written by Dr. J. Weiss, of Vienna. In the "Deutsche Medicinal Zeitung, January 14, 1884," we read in an announcement and welcome of the book before us, that there does not exist in the German tongue a compendium of psychiatry, at least not one that has won its civil rights in medical circles. We most heartily regret this statement in the interest as well of Dr. Weiss' able essay as in the interest of the profession which, according to the reviewers, Dr. Kron's statement must have taken but little notice of the same.

Nobody expects in a compendium anything new or original as far as the subject treated therein is concerned. Books of that kind are written not for the specialist but for the information and instruction of the student in medicine and the general practitioner. They are intended to be a guide in a field unknown to them in its peculiarities. The only thing novel therefore and valuable and attractive in such works is the disposition and the arrangement of the material. The more practical, or, as we would suggest, historically instructive and natural the manner in which the author introduces his readers into the subject the easier and pleasanter it is for the latter to follow him with a right apprehension and conception.

As regards this main point we should give a decided preference to Dr. Weiss' way of disposing of the material. He introduces the student at once into the general symptomatology connected with or constituting the phenomena of insanity. In the part following

he classifies these symptoms by arranging them into groups and pictures in a most graphic and intelligible manner the different forms of manifestations of mental disturbances, their characteristics and their course. This is, undoubtedly, in our opinion, the natural and scientific way, viz.: firstly: observation, description and analysis of the phenomena; secondly: their order, classification and synthesis.

Dr. Kraepelin divides the subject into—firstly, general pathology and therapy of insanity; secondly, special pathology and therapy of insanity. In the first part, of division I, he commences with the general etiology, which, in our opinion, should be the last subject discussed, for the symptoms are the first phenomena observed, and from these we may cautiously and inquiringly proceed to the supposed causes, by the action of which they possibly may have come into existence. The general symptomatolgy only follows in the second part, and is, therefore, considering our present state of knowledge, wholly disconnected with the first part. In the third part, the course, the termination and the duration of insanity is discussed. In the fourth, the diagnosis. In the fifth, the general therapy, viz.: *a*, prophylaxis; *b*, somatic treatment; *c*, psychical management; *d*, treatment and management of special symptoms, as mental exaltation, suicidal and destructive tendencies, filthiness, masturbation, refusal of nourishment.

In the second division, the special pathology and therapy of insanity, the psychoses are classified, viz.: I. States of depression: *a*, melancholia simplex; *b*, melancholia with delusions. II. States of semi-consciousness (Dämmerzustände): *a*, state of pathological sopor, hypnotism, somnambulism, somnolence; *b*, epileptic and hysteric conditions; *c*, stupor and ecstasy; *d*, dementia

acuta. III. States of mental exaltation: *a*, melancholia activa; *b*, mania; *c*, deliria, viz., delirium febrile and alcoholicum. IV. Periodical psychoses: *a*, mania periodica; *b*, melancholia periodica; *c*, circular insanity. V. Primäre Verrücktheit. VI. Dementia paralytica. VII. States of psychical imbecility, primary and secondary, etc.

Aside from the, in our opinion faulty, arrangement of the material, the various subjects are treated with skill and profound knowledge. The author is well known by his able investigations into the relation of acute febrile diseases to insanity, and from other writings as a careful and experienced observer.

The book is dedicated to Professor B. von Gudden, in Munich, and has been well received in Germany. It is a volume of 384 pages, and one of the series of Abel's medical compendiums. D.

Gerichtliche Psycho-pathologie (*Forensic Psycho-pathology*) bearbeitet von Dr. L. Schlager, Prof. in Wien, Dr. H. Emminghaus, Prof. in Dorpat. Dr. L. Kirn, Docent. in Freiburg i. B. Dr. M. Gauster, Sanitätsrath in Wien. Dr. R. v. Krafft-Ebing, Prof. in Graz. Tübingen, 1882. (Vol. IV of I. Maschka's Handbook of Forensic Medicine.)

The subject treated in this book is divided into six parts. Part I, (Schlager) on the importance and the tasks of state legislation concerning the insane, as also on the subject and the various aspects of medico-legal examinations as applied to insanity. Part II, (Emminghaus) children and minors. Part III, (Emminghaus) idiocy and dementia. Part IV, (Kirn) the simple psychoses and the mental disturbances characterized by progressive mental debility in their medico-legal aspects. Part V, (Gauster) states of psychical degenerescence. Part VI, (v. Krafft-Ebing) alcoholic insanity, epilepsy,

hysteria, states of morbid unconsciousness, aphasia, deaf-mutism.

Schlager discusses the questions of general interest and importance. He gives general directions for making psychiatrico-forensic examinations, and points out what is most important to be observed in criminal cases. He discusses the question of the criminal responsibility, and the civil rights of the insane, their testimonial and testamentary capacity, further the procedure in lunacy; the value of the etiological factor, of course and prognosis in the judgment of the respective case; the care, the custody and treatment of the insane; the significance of post mortem appearances and their relation to the existence of psychical disturbance during life; the simulation and dissimulation of insanity. Most of the chapters are well written, and we recognize everywhere the learned and experienced alienist and expert. Since the author has, in his essay, more especially in view the state of affairs as existing in Germany, we think an exposé of the German legislation on lunacy, would have been a valuable addition. The views entertained by him favorable to legislative provisions and regulations as regards the erection, organization and administration of hospitals for the insane will probably be met in Germany with decided opposition.

The second and third part, by Emminghaus, children and minors, and idiocy and dementia, are both provided with an introduction containing the paragraphs of the German and the Austrian penal code relative to the insane. The limits of childhood, that is of absolute freedom from the penalties of the law is, in Germany, at the end of the twelfth, in Austria, of the tenth year. Yet children below that age may be committed to houses of refuge or correction. In these cases it is frequently left to the judgment of the medical

expert to decide whether the dangerous conduct of the child is normal and capable of correction, or abnormal, indicating the existence of morbid influences or congenital defect. Each individual is a minor in Germany to the eighteenth and in Austria to the twentieth year. Any misdemeanor or crime committed during this period of life is tried in court, yet in each individual case the question as to the degree of legal responsibility of the offender is to be specially answered after careful examination, and even if in the affirmative he is granted the benefit of a milder punishment. The author points out that neither the eleventh nor the thirteenth year is physiologically or psychologically a turning point in the life of men, and he calls attention to the fact that during that period concomitant with a more rapid physical development in all directions, the psychical sphere of the youth is commonly marked either by a certain grade of exaltation or morbid desires or perversities in character or conduct, which may lead to an entire misapprehension and misjudgment of his personality. This is all very true theoretically and from a medical and anthropological point of view, but whether it would be practically of any advantage to extend the limits of childhood over this period, to developed puberty, is more than doubtful, especially in consideration of the fact that these years altogether call for closer supervision and control, and for stricter educational measures. Otherwise the author's exposition and disposition of the material is attractive and full of interesting remarks; the cases given for illustration, however, are not original, but well known in psychiatrical and medico-legal literature. The chapter on idiocy and dementia is short but well written.

In the fourth part Kirn discusses the forensic relations of melancholia, mania, primäre verrücktheit,

acquired dementia, senile dementia, paralytic dementia, etc. He gives in his well known graphic style, first a clinical description of the conditions, and then explains their forensic significance and bearings. The illustrating cases are carefully selected.

Gauster in part five, treats of the states of psychical degenerescence. He has selected unquestionably the most difficult subject. It embraces the question of the influence of heredity in insanity; impulsive insanity; the so-called monomanias, and the doubtful species of moral insanity, *sensu strictiori*, without any intellectual debility or disturbance, and all those doubtful cases which always give rise to the unfortunate conflicts between the medical and the juridical judgment of which no country, perhaps France excepted, is richer than Germany, herself. The essay from a certain, as it seems at present the prevailing, German and French point of views, will be greeted as a masterpiece of deep psychological, philosophical and humanitarian or anthropological thought; the result of most subtile observations and keen combinations. It will be received in England and America with less enthusiasm. Psychical degenerescence! Attention is here called even to each external physical anomaly, however small it may be or whether it concerns the skull, the eyes, the nose, the ears, the teeth, the mouth, the palate, the skeleton, the extremeties, the sexual organs, the hair, the skin. Here we read that inebriety is at times in the form of dipsomania, a hereditary disease. In several places the author contradicts himself or gives explanations which do not harmonize with his terminology. He accepts the term "moral insanity," and acknowledges that this form has received its anthropological foundation since Prichard's time, and yet he says, page 467: "*I must repeat here what I have already expressed in 1877, that a close and careful examination of all cases of the so-called*

moral insanity clearly shows, that we have there not simply to do with moral perversity, with the simple depravity of the so-called moral sense, but, that in the entire psychical function of the brain there exists a deviation from the individual or average normal, or sound condition, and as a rule in the form of mental degradation. We have not to do here with a moral insensibility, but, with a more or less developed, often high-graded, mental imbecility." (Schwachsinn). Westphal, 1878, says: "*The defect in moral insanity may be briefly designated as mental imbecility,* (Schwachsinn), *yet is true, of a very peculiar grade, the recognition of which demands much and most attentive study, much time and skill.*"—*Satis!*

Some of the illustrating cases, given by Dr. Gauster, as the one on page 438, both typical in the author's opinion as to hereditary influences and in the form of periodical insanity is, in our opinion, badly selected.

There are nevertheless many good points in the essay, and it is not only worth reading, but should be carefully studied by all interested in forensic psychopathology. It is in some sense the most important part of the book.

The last part is written by v. Krafft-Ebing, and treats of alcoholic insanity, epilepsy, hysteria, the states of morbid unconsciousness, aphasia, and deaf-mutism. The author's studies and essays in forensic medicine, and his vast experience as an expert in psycho-pathology is too well known to expect other than valuable and practical information on each of the subjects discussed. It is full of facts and of sound judgment, and free from theoretical speculations.

The whole book represents a volume of 668 pages, of which Schlager contributes 156; Emminghaus, 96; Kirn, 166; Gauster, 81; and Krafft-Ebing, 154. It will probably be for some time in a measure a standard work on forensic psycho-pathology in Germany. D.

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SUMMARY.

THE MEDICAL JURISPRUDENCE SOCIETY OF PHILADELPHIA.—A new organization has been formed in Philadelphia called The Medical Jurisprudence Society. Dr. S. D. Gross has been elected President; George W. Biddle, Esq., and Dr. John J. Reese, Vice Presidents; Dr. Henry Leffmann, Secretary, and Hampton L. Carson, Esq., Treasurer. There are now about sixty members. Stated meetings will be held on the second Tuesday of each month.

THE INSANE ASYLUM AT MIDDLETOWN, CONN.—Governor Waller, in his annual message, submitted to the General Assembly on the 9th of January last, calls attention to the fact that this asylum, with its annex and cottages, is overtasked. With provision for 775 patients, the average number for the past year was 854. Another building, to accommodate 250 patients, it is suggested, would meet the demand for ten years.

A REMARKABLE SUICIDE.—In the *Lancet*, of March 22, 1883, is a report of a remarkable suicidal injury which was published by Dr. Ringer in the *Imperial Maritime Customs*. The patient, a man, "after having attempted self-murder in various ways, at last seized the opportunity of chocking himself by thrusting the long handle of a feather broom down his throat. After great difficulty the greater part of the rattan handle was withdrawn, but, to the dismay of Dr. Ringer, it was found that a considerable portion was wanting. In a few days the patient died from exhaustion. At the autopsy a laceration on the left side of the pharynx

communicated with an abscess, which again opened into the right pleural sac. In the purulent offensive fluid of the right pleura a piece of rattan $5\frac{2}{10}$ in. long was found."

The Bite of an Epileptic.—Attention has been drawn to the danger of injury from the bite of a human being while suffering from a fit. A young man who assisted a woman who had fallen in a fit and was convulsively biting everything within reach, received a bite on the hand and died three days afterwards. This created a scare, and gives rise to anxious and grave questions. In all probability the man who met his death in this way would have fallen a victim to any other injury producing equally strong impression on his body and mind. There is no poison in the bite of a person in a fit, as there is in the bite of a rabid dog. Many scores of attendants on epileptics are bitten and nothing comes of it. Any wound may set up serious irritation, or erysipelatous inflammation may supervene, with the result of placing life in imminent peril; or terror may kill. It is, of course, desirable that every care should be taken to avoid the bite of an epileptic, as it is also that of any other excited or enraged creature; but there is not the slightest ground for supposing that worse consequences will follow an injury of this class than one of any other description if it be equally severe, and is attended on the part of the victim by a morbid state of the constitution.—*The Lancet, Jan. 12, 1884.*

Report of the Inspector-General of the Insane in New South Wales for 1882.—The proportion of insane persons in the population seems to be increasing very slowly, being now 1 in 354; and the admissions bear additional testimony to this, having been only 1

in 1728 of the population; the average for the last five years having been 1 in 1654. Of the admissions, moreover, 9.51 per cent. were relapsed cases. The recoveries were 44.1, and the deaths only 6.27 per cent. on the average number under treatment, both bearing evidence of satisfactory care.

A table which contrasts the proportion of the insane of each nationality in the community is of interest, showing that while only 1.40 per 1000 of the colonial born are thus affected, of the English 6.36, of the Irish 11.63, and of the French 12.06 are insane. The excess of the French is due to the exportation of lunatics from New Caledonia.

The Reception House for certified lunatics, and for the doubtful cases which are remanded by the police magistrates, appears to work very satisfactorily. Nearly eight per cent of the cases received in this institution recovered without being sent to the asylums, and the inspector is emphatic on the advantage derived from this establishment. This appears to be a distinct advance on the English system of dealing with the insane, by sending them either to a prison or work-house, instead of to an asylum, at a time when skilful care and treatment may cut short an attack that might otherwise be of long duration.

The report contains many other points of interest, and throughout bears testimony to the zealous vigilance of the Inspector-General.

Report on the Lunatic Asylums of New Zealand for 1882.—The insane in the colony, by this report, are 1269 in number, being 1 in 413 of the population. The same rates in England being 1 to 353, in New South Wales 1 to 352, and in Victoria 1 to 277. The insane are, however, rapidly accumulating, so that the

commissioner recommends a new asylum for 600 beds, as well as an addition of 100 beds to the Auckland Asylum.

Recent legislation appears to have been retrogressive, in imposing on the medical superintendents the duty of "recovering maintenance money" and in prohibiting them from making post-mortem examinations on their patients. Both these regulations would seem to indicate the predominance of the notion in the minds of the colonial legislators of the idea that asylums were places for detention merely, and not for treatment. The commissioner's protest against these anomalies, it is to he hoped, will sooner or later be successful.

The commissioner in lunacy is also inspector of hospitals for the colony, and in the performance of this duty states that he has traveled 4000 miles in little more than seven months. The reports on the hospitals are interesting in their details, and on the whole their state would seem to be fairly satisfactory. They are partly maintained by governmental subsidies, in part by voluntary contributions, and in part by payment from the patient. Many abuses are, however, reported, more gross in character even than those of which our own hospital system admits. Dr. Grabham's unsparing exposure of them will doubtless lead to reform and improvement.—*The Lancet, November 3, 1883.*

GHEEL.—From the Paris *Morning News* of March 2, 1884, we extract the following. Dr. Tucker will be remembered, as having some months ago visited several American asylums:

The whole region at Gheel is low and swampy, and perfectly flat. Nothing in the nature of a bill breaks the monotony of the landscape, and even the smallest undulation of ground is wanting. There is no commerce of any kind, and the town, which has a pop-

ulation of about six thousand souls, of whom nearly two thousand are lunatics, is as dull and depressing as it is possible to imagine. The streets are narrow and ill kept, the houses are old and rickety, and small drinking shops abound. The hospital to which new patients are brought is situated in a low and wet sandy flat, and has an aspect of gloom and melancholy. The new-comers are retained for a while in this hospital, and are then drafted out amongst the cottagers. In one drinking house I saw a Dutch woman and three men gambling with cards for money. There was a good deal of loud talk going on, and judging by the hilarity evoked, the men were much amused by what the poor lunatic was saying; and she was saying things of great impropriety, especially considering the presence of men. For the care bestowed upon the unfortunate patient her friends pay 1,500 francs a year to the people of the house.

Dr. Tucker studied Gheel and its population closely and fairly. "Dullness and monotony," says he, "are universal." There is nothing to occupy the time and attention of the patients but the almost enforced labour imposed upon them, which in many instances is repugnant to their feelings and unsuitable to their physical and mental conditions. In other respects they are left to their own resources, and their life from day to day and year to year is a mere torpid existence, devoid of variety in the present, and hope in the future—an existence as stagnant and unwholesome as that of the water in the dirty pools scattered all over the place. He found patients living in rooms in cow sheds, and as regards accommodation the cow was in many cases better provided for than the patient. Everywhere he found smoke, dirt, want of space, deficiency of wholesome or even decent accommodation and comfort; universal wretchedness and sordid misery. "Instead of the extra care and attention, which the condition of insanity requires," says he, "I found vastly less than ordinary humanity should experience. With few exceptions the patients were treated more like individuals of the brute creation than like human beings having special claim for care and protection in their helplessness and dependency."

The opinion which Dr. Tucker forms from his close inspection is unqualified and altogether adverse to the Gheel system. "The patients would be incomparably better treated in the lunatic ward of any well-regulated work-house or in any ordinary lunatic asylum. The supervision theoretically provided is insufficient and inefficient. The people of the house or cottage where the poor patient lives employ at will such mechanical restraints as they

please or deem necessary, and it rests with them how they report to the hospital, or whether they report at all. Too many sane people are dependent chiefly for their living on these lunatics. The people have little or nothing else in the way of income to support themselves and their large families."

JUDGE LAWRENCE ON THE RELEASE OF LUNATICS.—The New York *Times* makes the following very pertinent remarks, upon the ruling of Judge Lawrence, respecting the release of lunatics from insane asylums. It says:

Judge Lawrence has laid down a good rule respecting the release from insane asylums of persons of unsound mind. It is not enough, he says, that the relatives of such a person shall be willing to maintain him at home. The conscience of the court must be satisfied that there is no likelihood of the disease changing so that it will cause the patient to become violent or subject to the homicidial mania; for the court would not be any the less responsible if the patient killed the relative who assumed, by its authority, the duty of watching over him than if he killed somebody else. In other words, Judge Lawrence holds that a court should not allow any person to voluntarily, but unnecessarily, take a risk of losing life; that if it is shown that a person confined in an asylum for the insane is not insane, he must be released; and that insane person who is not harmless beyond the possibility of doubt must be kept in some institution, public or private, as his relatives may choose, where he will be under proper restraint and discipline. Recent events have shown how wise and how necessary is the rule thus formulated. A number of persons who were declared sane, after trial, either by referee or by jury, have had to be sent back to the asylums. The rule stated by Judge Lawrence should control Judges who have to pass upon testimony taken before referees. It is also a guide for the managers of public insane asylums. They should no longer release patients merely because their relatives are willing to assume responsibility for their acts. The responsibility which Mrs. Sullivan assumed at the dictation of Dr. MacDonald, of Ward's Island, in 1881, did not prevent her husband from killing Policeman Malone on Friday morning.

EXAMINATION OF CRIMINALS SUSPECTED OF INSANITY.—At a recent meeting of the Metropolitan Branch of the British Medico-Psychological Association, Dr. D. Hack Tuke offered the following resolution:

> That all persons charged with crime respecting whom there is any suspicion of insanity, shall be examined at the expense of the treasury, by three medical men—namely, the Prison Surgeon, the Superintendent of the asylum in the neighborhood, and a medical man of repute practising in the vicinity, and that their joint report shall be handed to the counsel for the prosecution.

The resolution was adopted.

At the same meeting Dr. Savage read a paper on "The Evidence of Insanity in Criminal Cases."

— The number of suicides in New York during the past year was 161. Seventy-eight of them were married, 43 single, 24 widowed and divorced. The list includes 134 males and 27 females. Nine of them were less than 20 years old, 30 between twenty and thirty, 44 between forty and fifty, 29 between fifty and sixty, 7 between sixty and seventy, while 5 suicides became tired of life in the eighth decade. Among the nationalities Germans come first with 70 suicides. Shooting was the favorite method of killing, since it was resorted to in fifty-six instances.

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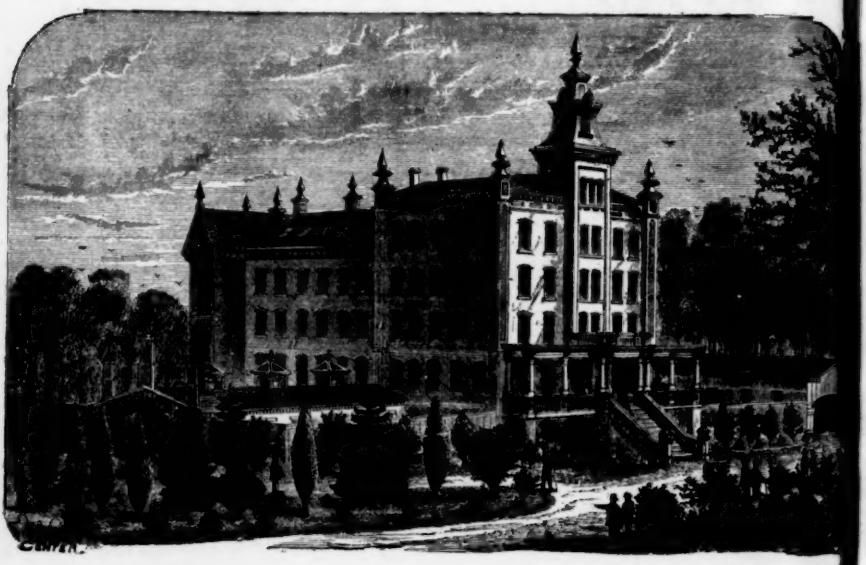

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